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This Oil is unsurpassed for aroma and strength.

**FINEST FRUIT ESSENCES**  
Prepared from Selected Fruit by Special Process.

Highly Concentrated  
**FRUIT ESSENCES**  
For Flavouring Purposes and Confectionery  
Of every description.

**PURE HARMLESS VEGETABLE COLOURS**  
For CONFECTIONERY.  
Of guaranteed purity and exceptional brilliancy.

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REQUIRED BY

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**ESSENTIAL OILS**  
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**PURE CONCENTRATED**

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**FRUIT ESSENCES.**

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Of Every Description.

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„ Caraway.

Oil Orange.  
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Soluble Essence of  
**JAMAICA GINGER,**  
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For giving a Close Creamy Head to all Beverages.  
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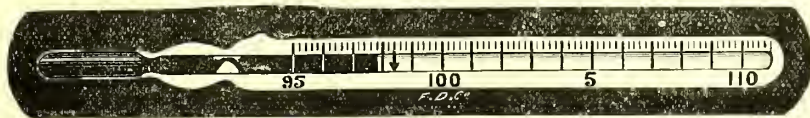


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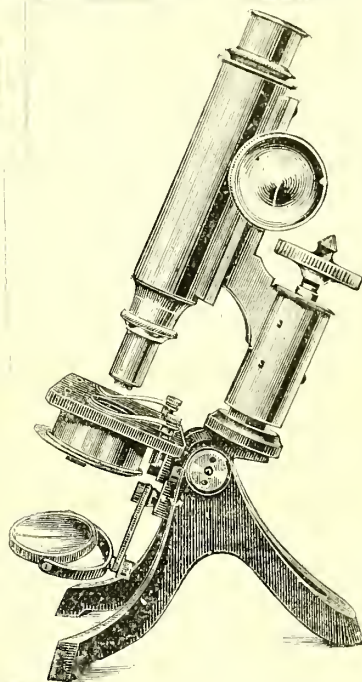
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Combines in one clear Fluid every valuable  
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" W. J. Daniel	" C. E. Pinckney
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" J. Gale	" J. E. Sargeant
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The curriculum of this School has been submitted to and approved of by the Council of the Liverpool Chemists' Association, who have appointed the following gentlemen to visit the School from time to time, and otherwise control the study:—

Messrs. T. F. ABRAHAM, M. CONROY, F.C.S.,  
C. SYMES, Ph.D.

Seven Gentlemen presented themselves for examination at the April Examination. The following five passed:—

Mr. ALFRED JOHNSON	.. ..	Liverpool
Mr. J. G. JACKSON	.. ..	Sheffield.
Mr. T. M. LEWIS	.. ..	Narbeth.
Mr. R. E. LLOYD	.. ..	Garston.
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1/4 per gallon; in 40-gallon casks, 1/3 per gallon.

TESTIMONIALS received from Mr. HEAD, Crystal Palace; Mr. IRWIN LYNCH, Cambridge Botanic Gardens; and others.

THE "ACME" WEED KILLER, FOR CHEAPNESS AND EFFICIENCY, HAS WON FOR ITSELF A NAME FAR ABOVE ALL OTHERS.

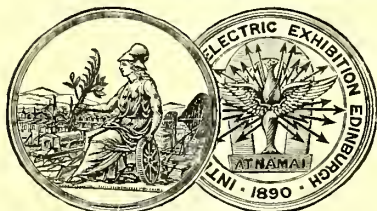
SOLE PROPRIETORS AND MANUFACTURERS—

**THE ACME CHEMICAL CO., LIM., Tunbridge, Kent; & Carlton St., Bolton, Lancashire.****It is acknowledged by the Trade that  
THE "FLY CEMETERY"**

Is the most saleable Fly Paper ever introduced. It is non-poisonous, and the enormous annual increase in the sale of it is positive proof of its popularity. Many Chemists sold more "Fly Cemeteries" last year than they ever did in their lives of all the other fly papers put together.

Samples, Testimonials, and Price on application to  
**TUNBRIDGE & WRIGHT, READING.**



**WANDSWORTH CHEMICAL WORKS, LTD.****CARBOLIC DISINFECTANTS.**

Silver Medal, Edinburgh, 1890. Highest Award.

**CARBOLIC POWDER:** Pink, White or Grey

Any strength. Packets, Tins, and in Bulk.

**CARBOLIC ACIDS:** CRUDE,  
95/97% PALE, and WATER WHITE.**SANITARY FLUID** or **CREOSOL:**

Bottles, Drums, and Casks.

**IMMEDIATELY SOLUBLE IN COLD WATER.**

Gold Medal, Jamaica, 1891. Highest Award.

**"PINEOTAS" DISINFECTANTS.****"PINEOTAS" POWDER, FLUIDS, AND OIL.****CONCENTRATED FLUID SHEEP DIP****CARBOLIC AND "PINEOTAS" SOAPS, PETROLEUM  
JELLY, CHLORIDE OF LIME, &c.****WORKS & WHARF: THE CAUSEWAY, WANDSWORTH, S.W.****DUSSEK BROS. & CO.'S****SOLUBLE SANITARY FLUID (MILKY),  
CARBOLIC ACIDS & POWDERS**

Of all strengths, in various packages for the Trade and for Export.

Also Sheep Dip, Tar and Rosin Products, Dubbin, Greases, Creosote,  
Brunswick Black, &c.**DUSSEK'S WHARF, VERNEY ROAD, S.E.**

TELEPHONE No. 4833.

TELEGRAMS—"DUSSEK LONDON."

**CARBO-EUCALYPTINE**

VOLATILE AIR-PURIFYING

**SANITARY TABLETS.**Supplied to the Houses of Parliament, Hospitals, Hotels, Railway Companies, Board  
Schools, Shipping, and 50,000 Dwellings, &c.

From S. J. COURTNEY PAIN, Medical Officer in Charge, GAILKORA, BENGAL, June 19, 1892:—

"I have found the Carbo-Eucalyptine Sanitary Tablets of great value in my Cholera Camp.  
Please send at once a six months' supply for our Hospital here," &c., &c., innumerable.

First Sample Dozan 3/6 (Parcel Post), Showcard, &amp;c.,

For Cash with Order, or £2 a Gross, from all Chemists' Sundrymen, or the

**EUREKA MANUFACTURING COMPANY, CLAPTON PARK, LONDON.**

Especially put up for India and Tropics, and minus price.

AVERAGE RETAILER'S SALES 1-GROSS WEEKLY.

# EXCHANGE COLUMN.

This Section of "The Chemist and Druggist" must be closed for press by Wednesday morning's post of each week. Remittances payable to EDWARD HALSE.

## TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of the CHEMIST AND DRUGGIST, 42 Cannon Street, E.C." and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

**DEPOSIT OF MONEY.**—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin's Bank (Limited)."

### FOR DISPOSAL

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For sale, 130 well-tryed recipes, neatly copied in book, post, 1s. 6d. Tully, Chemist, Hastings.

For sale, recipe for non-excisable ginger-wine essence; an original formula, producing an essence of great aroma and fine flavour; no alcohol used; price 5s. R. B. Huggins, Chemist, Wainfleet, R.S.O.

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56 lbs. insect-powder, 9d. per lb.; sample  $\frac{1}{2}$  lb. for 12 stamps. J. J. Thomas & Son, Rochdale.

For sale, water-mattress, 37 in. by 73 in., in good condition; no fever case; price 4l. Horne, Chemist, 12 Market Hill, Barnsley.

Adeps Laura, P.B., 1s. 3d. per lb.; air-mattress 72 x 36, quite clean, used one month only, price 40s. Coley, Chemist, Stroud.

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Three Carrick's Lactopreparata; 3 Lactocereal food, 2s.; 1 Koumyss tablets, 2s. 6d.; 100 each Pancreobilin pills, plain, compound, and tonic; offers? Holmes, Chemist, Margate.

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Mahogany counter-top, 8ft. long and 2ft. wide; cheap. Thomas Powell, Fairford.

One or two  $\frac{1}{2}$ -plate and  $\frac{1}{4}$ -plate cameras; must be cheap and good. Send specimens of work done, and full particulars, to Wheeler, Chemist, Guildford.

✠ SHOP FITTERS,  
SHOWCASE  
MAKERS.

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OF ALL DESCRIPTIONS, NEW AND SECOND-HAND

Chemists commencing, opening Branches, or making alterations, can be fitted throughout immediately, and save 25 per cent. by purchasing from our extensive stock.

TRANSFER AGENCY NOW OPEN. Several good Businesses for Sale and Wanted.

Stock taken, Valuations made, and Sales effected on most reasonable terms.

NO CHARGE for REGISTERING BUSINESSES for SALE, and NO CHARGE TO PURCHASERS. ✠

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CITRATE OF MAGNESIA?**  
JUDGE FOR YOURSELVES BY ASKING FOR QUOTATIONS FROM  
**DUNCAN, FULLER & CO., 150 MINORIES, E.C.**

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of the Solicitor's Department, Somerset House. Price 2s. 6d. By post, 2s. 9d.

"MANUAL OF PHARMACEUTICAL TESTING." By B. S.  
PROCTOR, F.I.C. Price 2s. 6d. By post, 2s. 9d.

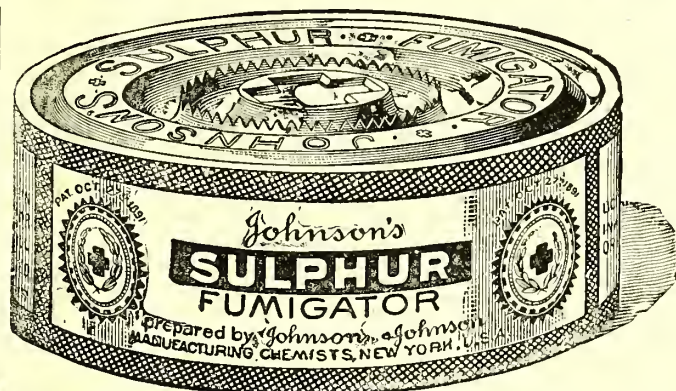
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Street, London, E.C.; and from all Wholesale Houses.



# JOHNSON'S SULPHUR FUMIGATOR.

Patent No. 18,434  
of 1891.



Patent No. 18,434  
of 1891.

FOR FUMIGATING INFECTED ROOMS AFTER

**Cholera, Diphtheria, Typhoid Fever, Smallpox, Scarlet Fever, & other Contagious Diseases.**

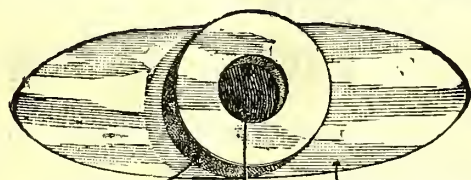
Destroys noxious vapours from sewers, &c. By the use of these Fumigators a safe and convenient mode of burning sulphur indoors is provided.

One Fumigator will burn two hours, and is sufficient for an ordinary sized room.

JOHNSON'S FUMIGATOR is put up in a specially prepared FIREPROOF BOX, and will not burn nor become red hot like tin or other metal packages.

Packed in neat Show Boxes with folding covers. A showy Counter Article. Retail price, 1/.

## LONDON CORN PLASTERS. ABSORBENT COTTON WOOL.



Felt Shield  
Corn Salve  
Isinglass Plaster

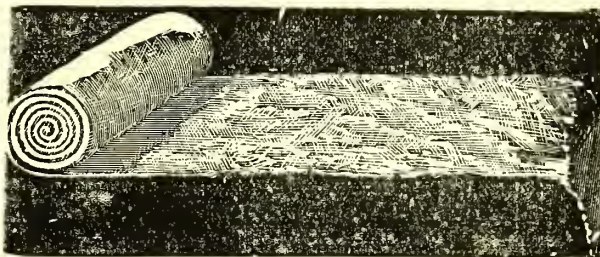
### JOHNSON & JOHNSON

Briefly described as follows:—The centre is a piece of Salicylic Plaster Mass (40 per cent.), which is placed over the corn.

Around this is a corn shield, which prevents pressure from the boot and the Salicylic from going beyond and injuring the flesh.

The whole is kept in position by means of a strip of adhesive plaster on the back.

Packed in 6d. and 1/ boxes. Sample dozen mailed to any chemist's address, on receipt of 3/6 for the 6d. size, or 6/6 for the 1/ size.



Rolled with Tissue Paper between to prevent felting,

The Invention of JOHNSON & JOHNSON.

**AS EASY TO APPLY AS A CLOTH BANDAGE.**

In ordering from Wholesale Trade specify JOHNSON & JOHNSON.

**JOHNSON & JOHNSON, LIM., 12<sup>A</sup> LONG LANE, SMITHFIELD, E.C.**

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MANUFACTURING PHARMACEUTICAL CHEMISTS.

PHILADELPHIA, U.S.A.

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We were the **FIRST** to introduce to the Pharmacist and the Medical Profession, a line of

## COMPRESSED PILLS (OR POWDERS)

We are the **LARGEST** Manufacturers of this line of products.

The Machinery and appliances connected with our compressing department are Marvels of Perfection and Accuracy, and the Products wonderful in their Accuracy, Beauty, Style of Finish, Ready Solubility, and Permanency. We use only the **PUREST MATERIAL**. The closest attention is given to every detail of manipulation, and the whole process is under the supervision and direction of the highest commercial integrity, thus ensuring the **SUPERIORITY** of our Preparations.

THE RETAIL CHEMIST WILL DO WELL TO NOTE THAT

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**WYETH'S SUGAR-COATED COMPRESSED PILLS (OR POWDERS)**

**WYETH'S SOLUBLE COMPRESSED HYPODERMIC DISCS**

**WYETH'S COMPRESSED OPHTHALMIC DISCS**

**WYETH'S BEEF JUICE**

AS WELL AS

**WYETH'S DIALYSED IRON**

**WYETH'S ELIXIR DIGESTIVE FERMENTS**

**WYETH'S GLYCEROLE CHLORIDE OF IRON**

Are being presented to the attention of the Medical Profession by means of personal interviews, samples and literature, and Advertisements in the Medical Journals. They are being prescribed by Physicians and ordered by Hospitals, and should be found in stock in every well-appointed Pharmacy.

*NOTE That all Labels of Wyeth's Pharmaceutical Preparations bear the full firm name and address, "JOHN WYETH & BROTHER, PHILADELPHIA, U.S.A.," and the name and address of the Resident Representative, "WILLIAM F. HORTON, 30 Snow Hill, LONDON."*

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**F. H. PROSSER & CO.,** 14 Ethel Street, **BIRMINGHAM.**

Where a full supply of **WYETH'S PHARMACEUTICAL PREPARATIONS** can be obtained on best terms.

CATALOGUES AND PRICE LIST ON APPLICATION TO THE ABOVE, OR TO

**WILLIAM F. HORTON,** Resident Representative of **JOHN WYETH & BROTHER, 30 SNOW HILL, LONDON, E.C.**



Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

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Fuerst Bros.  
Lorenz, H.  
Morris & Callard (Salts)

## ACIDS

Boulton, J., &amp; Co., Lim.

## ADVERTISING SPECIALITIES

Lawton, J. W. | Sears, F. W.

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Barnett & Foster  
Burroughs, Wellcome & Co.  
Chemists' Aerated Waters Association, Lim.  
Eills & Son (Ruthin)  
Franz, Josef  
Idris & Co., Lim.  
Ingram & Royle  
Jewsbury & Brown  
Johannis Co.  
Kiumond & Co.  
Levico Water  
Mills & Co. (Bourne)  
Rosbach Water Co.

## DITTO PLANT

(See SYPHONS and ESSENCES.)  
Barnett & Foster  
Brathay & Hinchliffe, Lim.  
Guert Freres  
Meadowcroft & Son  
Rylands, Dan, Lim.  
Tyler, Hayward, & Co.

## AGNCIES ABROAD

Australasian Drug Co.  
Kemphorne, Frosser & Co.  
Lennon, B. G., & Co. [(N.Z.)  
Peake, Allen & Co.  
Prosser, Taylor & Co.  
Soul, W. H., & Co.

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Smith, T. & H., & Co.

## AMMONIA

May & Baker, Lim.  
White, A., & Sons  
Woolley, Sons & Co.

## APPARATUS

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Christy, T., & Co.  
Hicks, J. J. | Ohlson, A.  
Orme, J., & Co. (Scientific)  
Perken, Son & Rayment  
Poths, H., & Co.

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## BANDAGES

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Robinson & Royle  
Schutze, F., & Co.

## BATH &amp; FLESH GLOVES

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Chemists' Association, Lim.  
Maw, S., Son & Thompson  
Pattison, G. | Solport Bros.

## BICARB. SODA

Brunner, Mond & Co., Lim.  
Howards & Sons  
May & Baker, Lim.

## BISMUTH PREP.

Heaton, Squire & Francis  
Hewlett & Sons  
Howards & Sons  
May & Baker, Lim.

## BOOKS

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## BORAX

Howards & Sons  
Mack's Starch

## BOTTLES

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Barrett, R. H.  
Brathay & Hinchliffe, Lim.  
Evans, Sons & Co.  
Gilbertson, H., & Sons  
Hearn, E. A., & Co.  
Isaacs & Co.  
Johnsen & Jorgensen  
Kilner Bros.  
Poths, H., & Co.  
Rylands, Dan, Lim.  
Toogood, W.  
W. Brand Bottles  
Youldon, E.

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Anstin & Co. (Cardboard)  
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Crowden & Garrod  
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Kent, G. B., & Sons  
Kilner Bros. | Maxime & Co.  
Robinson & Sons  
Rylands, Dan, Lim.

## BRUSHES

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Kent, G. B., & Sons

## BUNSEN BURNERS

Berend &amp; Co.

## BUTTER COLE, &amp;c.

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Crawshaw & Co.  
Hartick & Co., Lim.

## CACHOUS

Biesdale & Co.  
Blyton, Astley & Co.  
Jackson, Thos., | Pasall, J.  
Warrick Brothers

## CAMPHOR

Fuerst Bros.  
Howards & Sons  
May & Baker, Lim.  
Morrison, J., & Co. (Comprsd)

## CAPSULES

Denoual, J. (Medicinal)  
Duncan, Flockhart & Co.  
Evans, Sons & Co.  
Hartick & Co., Lim.  
Hooper, B., & Co.  
Lofthouse & Saltmer  
Richardson, John, & Co. (Leicester), Lim.  
Warwick Brothers  
Wyries, Lim.

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Calvert, F. C., & Co.  
Wandsworth Chemical Works, Lim.

## CSKRA SAGRADA

Anderson & Co.  
Duncan, Flockhart & Co.  
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## CASTOR OIL

Allen & Hanbury's  
Christy & Co. (Aromaticum)  
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Newbery, F., & Sons  
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Sanger & Sons

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Patent Voucher Check Till Co., Lim.  
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Chemists' Association, Lim.  
Hockin, Wilson & Co.  
Liverpool Patent Lint Co.  
Newbery, F., & Sons  
Pattison, G. | Solport Bros.

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Bohringer, C. F., & Sohne  
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Bramwell, E., & Son  
Brunner, Mond & Co., Lim.  
Fletcher, Fletcher & Stevenson  
Fuerst Bros.  
Goodall, Backhouse & Co.  
Hill, A. S., & Son (Clarke)  
Hodgkinson, Treacher & Howards & Sons (Pharm.)  
Levermore, Aug., & Co.  
Lofthouse & Saltmer  
Lorenz, H.  
May & Baker, Lim.  
Morris & Callard | Moss & Co.  
Smith, T. & H., & Co.  
Tyrer, T., & Co., Lim.  
Washington Chemical Co.  
White, A., & Sons  
Zimmermann, A. & M.

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Governmant Sanitary Co.  
National Chemical Co.

## CHLORODYNE

Blyton, Astley & Co.  
Davenport (Browne's)  
Towle, A. P., & Son

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Duncan, Flockhart & Co.  
Macfarlan, J. F., & Son  
Salamon & Co., Lim.  
Smith, T. & H., & Co.  
Wright, Layman & Umney  
Zimmermann, A. & M.

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French Hygienic Soc.  
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Burroughs, Wellcome & Co.  
Evans, Sons & Co.  
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Hockin, Wilson & Co.  
Hobson & Co.  
Smith, T. & H., & Co.  
Woolley, Sons & Co.**COFFEE**Symington, T., & Co. (Coffee  
Essence)  
White, Fairchild & Co.**COLAPSEL TUBES**

Betts &amp; Co.

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Blyton, Astley & Co.  
Burroughs, Wellcome & Co.  
Fuerst Bros.  
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Lloyd, T. Howard & Co.**CONCENT. LIQRS.**Fletcher, Fletcher & Stevenson  
Lloyd, T. Howard & Co.**CONFECTIONERY**Blyton, Astley & Co.  
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Fuerst Brothers  
Gibson, R., & Sons  
Guest, T., & Co. | Pascall, J.  
Southwell, C., & Co.  
Warrick Brothers**CORN CURES**Cheng, D. | Pattison, G.  
Solport Bros.**COTTON WOOL**Haynes, G., & Co. (Absorbent)  
Hobson & Sons (Absorbent)  
Sanger, J., & Sons**CRSHD LINSEED**

Mumford, S. G.

**DENTIFRICES**Bailey's Toilet Co.  
Beecham, T.  
Bromley, H., & Co.  
Dorothy Dentifrice Co.  
Hanson, O.  
Jewsbury & Brown  
Lakeman, J. J.  
Quelch, H. H. & Co.  
Robertshaw & Co.  
Stevens, P. A.  
Sutton, O., & Co.  
Thompson & Capper  
Warrick Bros. | Wilson, A.  
Woods, W. (Acrea Nut)**DISINFECTANTS**Blyton, Astley & Co.  
Brooks, T.  
Calvert, F. C., & Co.  
Drysdale, J. W., & Co.  
Dussek Bros. & Co.  
Eureka Manufacturing Co.  
Fletcher Bros. & Co.  
Gover, ment Sanitary Co.  
Grindley & Co., Lim.  
Jeyes' Sanitary Compounds Co.  
Mackey, Mackey & Co.  
Mason, C. E., & Co.  
May & Baker, Lim.  
National Chemical Co.  
Sanitas Co.  
Seabury & Johnson  
Tyler, T., & Co. (Lim.)  
Wandsworth Chemical Works.**DOG MEDICINES**

Spratt's Patent, Lim.

**DRUGGISTS' SUN.**Ayrton & Saunders  
Bailey, M., & Co.  
Barclay & Sons, Lim.  
Bush, H. W., & Co.  
Chemists' Association, Lim.  
Chemists' Mineral Water  
Association, Lim.  
Crowden & Garrod  
Evans, Lecher & Webb  
Evans, Sons & Co. (Savars)  
Fordham, W. B., & Sons, Lim.  
Gloster, H., & Sons  
Hockin, Wilson & Co.  
Iris & Co., Lim.  
Kay Bros. Lim.  
"Lungli" Co.  
Maw, S., & Thompson  
May, Roberts & Co.  
Newbery, F., & Sons  
Quelch, H. C.  
Sanger & Sons  
Sanitary Wood-wool Co., Lim.  
Schultz & Co.  
Tidman & Son | Toogood, W. O.  
Tyer Rubber Co.  
Warne & Co.  
Wood, Vincent | Young, J.**DRUG MILLS**

Burroughs, Wellcome &amp; Co.

**DRYSALTERIES**Browning, J. H., & Co.  
Burton, W., & Sons**DYES, &c.**Ayrton & Saunders  
Burton, W., & Sons  
Crawshaw & Co.  
Hartick & Co., Lim.**EAU DE COLOGNE**Farina, J. M.  
Hockin, Wilson & Co. (Farina)  
Martin, Maria (Nun)  
Moloch, Oscar, & Co.  
Mulheus, F.**ELECTRIC APPAR.**Darton, F., & Co.  
Gent & Co. | Orme & Co.**EMBROCATION**

Day &amp; Sons

**ENEMAS**Barclay, Lim.  
Evans, Sons & Co.  
Sanger & Son**ENGRAVERS**

Corsan, J. R.

**ESSENCES**Boehm, Fredk.  
Boulton, J., & Co. (Lim.)  
Brathby & Hinchliffe, Lim.  
Burgoyne, Burbridge & Co.  
Busli, W. J., & Co.  
Fletcher, Fletcher & Stevenson  
Goodall, Backhouse & Co.  
Iris & Co., Lim.  
May & Baker, Lim.  
Meadowcroft & Son  
Newball & Mason  
Rylands, Dan, Lim.  
Stevenson & Howell  
Tyler, P. (Anchovies)  
Tyler, T., & Co.  
Woolley, Sons & Co.**ESSENTIAL OILS**Allen, Stafford, & Sons  
Barrett, A. A.  
Boehm, Fredk.  
Busli, W. J., & Co.  
Clay, Dod & Co.  
Cocking & Co. (Japan Pepper-  
Dodge & Olcott (mint)  
Dore, J. H. L.  
Evans, Sons & Co.  
Hockin, Sons, Treacher &  
Clarke  
May & Baker, Lim.  
Meadowcroft & Sons  
Sozio & Andrioli  
Stevenson & Howell  
Syms & Co.  
Treant, R. C.  
Vogt, G., & Co.  
Warrick Bros.  
Witrofsky, E.  
Wright, Layman & Umney**ETHER**Duncan, Flockhart & Co.  
Howards & Sons  
May & Baker, Lim.  
Robbins, J., & Co.  
Tyler, T., & Co.  
White, A., & Sons  
Woolley, Sons & Co.  
Wright, Layman & Umney**EUCALYPTUS**Bickford, | Bostisto's  
Drysdale, J. W., & Co.  
Evans, Lecher & Webb  
Fletcher, Fletcher & Stevenson  
Grimwade, Ridley & Co.  
Laughland, MacKay & Baker  
Murdock, J., & Co.  
Tasmanian Eucalyptus Oil Co.  
Vogt, G., & Co.  
Woods & Co.**EXALGINE**

Kuhn, B.

**EXTRACT MEAT**Brand & Co.  
Busli's Liquid Beef  
Iris & Co. (Viking Co.)  
Liebig Co.  
Liquor Carnis Co., Lim.  
Mason, G., & Co., Lim.  
Wyeth, J., & Brother**EXTRACTS, FLUID**Allen & Hanbury  
Burgoyne, Burbridge & Co.  
Evans, Sons & Co.  
Fletcher, Fletcher & Stevenson  
Hearon, Squire & Francis  
Hooper, R., & Co.  
Lloyd, T. Howard & Co.  
Potter & Clarke  
Vogt, G., & Co.  
Wright, Layman & Umney**FEED BOTTLES**Burroughs, Wellcome & Co.  
(Thermo Safe)  
Chemists' Association, Lim.  
Evans, Sons & Co.  
Hearn, E. A., & Co.  
Hockin, Wilson & Co.  
Kilner Bros. | Lynch & Co.  
Marriott, E., & Co.  
May, Roberts & Co.  
Maw, S., & Thompson  
Spence & Co.**FILTERS**Berkefeld Filter Co.  
Fordham, W. B., & Sons, Lim.  
Mawson Filter Co.  
Silicated Carbon Filter Co.**FLY PAPERS**Ford, Shapland & Co.  
Strong, Christy |  
Thunbridge & Wright**FOOD (Infants' & Invalid's)**Allen & Hanbury  
Benger's Food  
Brand & Co.  
Chishall, H. B.  
Evans, Sons & Co.  
Frame Food Co., Lim.  
Goodall, Backhouse & Co.  
Hearon, Squire & Francis  
Iris & Co., Lim.  
Liebig Co.  
Liquor Carnis Co., Lim.  
Lorimer & Co.  
Mason & Co., Lim.  
Nestlé, H.  
Ridge, Dr.  
Wyeth, J., & Bro.**FORMULA**

Brooks, T.

**GINGER ALE**

Mills, R. M., &amp; Co.

**GLYCERINE**Blyton, Astley & Co. (Pastilles)  
Boehm, F. | Fink & Co.  
Fuerst Bros.  
Greiff, R. W., & Co.  
Price's Candle Co., Lim.  
Watson & Sons**GOUT & RHEU-****MATIC PILLS**Bromley, C.  
Eade, Geo.  
Prout & Harsant (Blair's)**GRANULAR PREP.**Bishop, A., & Sons  
Blyton, Astley & Co.  
Evans, Sons & Co.  
Hearon, Squire & Francis  
Lloyd, T. Howard & Co.  
Wright, Layman & Umney**GUM**Pink & Co. (Arabic, &c.)  
Levermore, Aug., & Co.**HAIR PREP.**Anglo-American Drug Co.,  
Chesham & Co.  
Edwards & Co.  
Truefit, H. P., Lim.**HERBS**Newhall & Mason  
Potter & Clarke**HERB BEER EXTS**Newhall & Mason  
Potter & Clarke**HOMOEOPATHIC**Epps & Co.  
Keene & Ashwell  
Leath & Ross  
Thompson & Capper  
Watson & Wates**HYPOPHOSPHITES**Duncan, Flockhart & Co.  
Fellows  
Fletcher, Fletcher & Co.  
Synes & Co.  
Tyler, T., & Co.**INDIARUB. GOODS**Tyer Rubber Co.  
Warne, W., & Co.**INHALERS**Burroughs, Wellcome & Co.  
Hockin, Wilson & Co.  
Krohn & Seemann  
Spirone, Co., The  
Toogood, W.**INK [See MARKING INKS]**

Bewley &amp; Draper

**INSECTICIDES**Bewley, Tompsett & Co.  
Steiner & Co.**INSURANCE**London and Lancashire Fire  
Insurance Co.**IRISH VELS**

Warren, A. &amp; J.

**KETCHUP**

Tyler, P.

**KOLA PREPRTN**

Christy, T., &amp; Co.

**LARD**

Ewen, J., &amp; Co.

**LINT**Liverpool Lint Co.  
Maw, S., & Thompson  
Newsome, C.  
Robinson & Sons**LIQUORICE**

Dennis Di Lugo &amp; Co.

**LITHIA**

Fuerst Bros.

**LOZENGES**Allen & Hanbury  
Blyton, Astley & Co.  
Davies & Gray  
Gibson, R., & Sons (Manfrs.)  
Hill & Son  
Jackson, T.  
Raines & Co. | Warrick Bros.**MACHINERY**Bennett, Sons & Shears  
Burroughs, Wellcome & Co.  
Gardner, W.  
Mayfarth, Ph., & Co.  
Ohlson, A.  
Pindar, J. W.  
Stratton & Craig (Sifting)  
Werner & Pleiderer (Knead-  
ing and Sifting)**MAGNESIA**Bush, W. Son & Co.  
Duncan, Fuller & Co.  
Evans, Sons & Co.  
Greiff, R. W., & Co.  
Henry, T. & W. (Calced)  
Hill, A. S., & Sons  
Washington Chemical Co.**MALT EXTRACT, &c.**Allen & Hanbury  
Burroughs, Wellcome & Co.  
(Kepler's)  
Glendenning, W.  
Hearon, Squire & Francis  
Montgomery & Co.  
Moss, J., & Co.  
Raines & Co.  
Richardson, John, & Co. (Lei-  
cester), Lim.  
Robinson & Co.**MARKING INKS**Bond, John (Crystal Palace)  
(Ink and Pencils)**MEDICINE CHSTS**Burroughs, Wellcome & Co.  
Day, Son & Hewitt (Veterinary)  
Day & Sons (Veterinary)**MENTHOL**Burroughs, Wellcome & Co.  
Christy, T., & Co.  
Cocking & Co.  
Dunham, Fuller & Co.  
Evans, Sons & Co.  
Hockin, Wilson & Co.  
Tyler, P. | Vint, T. D.**MERCURIALS**Fuerst Bros.  
Howards & Sons  
May & Baker, Lim.  
Tyler, T., & Co.**METH. SPIRITS, &c.**Boord & Son | Burrough, J.  
Jones & Co.  
Phillips, G., & Co.  
Smith, S., & Co.  
Warren, A. & J.**METHYLENE**

Robbins, J., &amp; Co.

**MICROSCOPES**Darton, F., & Co.  
Perken, Son & Rayment**MILK**

Nestlé, H. (Condensed)

**MORPHIA**Macfarlan, J. F., & Cr.  
Smith, T. H., & Co.**NATURAL****MIN. WATER**

Hunyadi Janos

**OILS, PAINTS, &c.**Browning, J. H., & Co.  
Fox, W., & Sons  
Pinchin, Johnson & Co.**OINTMENT BASES**Burgess, E.  
Burgess, E., Jun.  
Burroughs, Wellcome & Co.  
(Lanoline)  
Chesham & Co. (Vaseline)  
Christy, T., & Co.  
Lloyd, T. Howard & Co.  
Richardson, J., & Co. (Lei-  
cester), Lim. (Anaspaline)**OPIUM**

Hopi, R., &amp; Co.

**OPTICIANS**Botwright & Grey  
Darton, F., & Co.  
Perken, Son & Rayment**OTTO OF ROSE**

Fuerst Bros.

**OKID OF ZINC**

Hubbuck, T., &amp; Son, Lim.

**PAPAIN**

Kuhn, B. (Dr. Finkler)

**PAT. MEDCNS, &c.**Anglo-Amer. Drug Co., Lim.  
Atkinson & Barker (Infant  
Preserv.)  
Barclay & Sons, Lim.  
Beecham, T. (Pills)  
Bow's, Dr. Liniment  
Bromley, C. (Gout and Rheu.)  
Chemists' Association, Lim.  
Clarke's Wood's mixture  
Congreve, G. F.  
Edwards & Son  
Evans, Lecher & Webb  
Fassett & Johnson  
Fennell (Powders)  
Goodall, Backhouse & Co.  
Holloway (Pills and Oint.)  
Hovenden & Sons  
Lalor (Phosphodyne, &c.)  
"Lungli" Co.  
May, Roberts & Co.  
Newbery, F., & Sons  
Popular Remedies Mfg. Co.  
Roberts & Co. (Foreign)  
Rooke, Dr., Lim.  
Southall Bros. & Barclay  
Sutton, W., & Co.  
Wilson, A. (Bunter's Nerveine)**PEPSIN, &c.**Amner & Co.  
Burroughs, Wellcome & Co.  
Chassaigne & Co.  
Fletcher, Fletcher & Stevenson  
Kuhn, B.  
Newbery, F., & Sons (Inglvin)  
Nern, G. & G.  
Warner & Co. (Inglvin)**PEPPERMINT OIL**Bush, W. J., & Co.  
Cocklin & Co.  
Stevenson & Howell**PERFUMERY.****FANCY SOAPS**Barclay & Sons, Lim.  
Blissdale & Co.  
Blondeau & Cle. | Bothm, P.  
Blyton, Astley & Co.  
Brooks, T. (Solid Perfume)  
Burroughs, Wellcome & Co.  
Bush, W., & Co.  
Chemists' Association, Lim.  
Chesham & Co.  
Evans, Sons & Co.  
Ewen, J., & Sons  
Farina, J. M.  
Hovenden & Sons  
Mulheus, F.  
Newbery, F., & Sons (Berdoes  
Pears', & F., Lim.  
Price's Patent Candle Co.  
Sandoz & Co.  
Sozio & Andrioli  
Tidman & Son | Treant, R. C.  
Truett, H. P., Lim.  
Warrick Brothers  
West, T. (Okell's Mona)  
Woolley, Sons & Co. (Powder)  
Wright, Layman & Umney**PEROX. OF HYDR.**Burton, W., & Sons  
May & Baker, Lim.  
Robbins & Co.**PETROLEUM**Allen & Hanbury  
Barclay & Sons, Lim.  
Dee Oil Co., Lim.  
Fuerst Bros. (Jelly)  
Hartick & Co., Lim.**PHARM. PREPS.**Allen & Hanbury  
Armour & Co.  
Arthur & Co.  
Barron, Harveys & Co.  
Boehm, Fredk.  
Boehringer, C. F., & Sohne  
Boulton, J., & Co., Lim.  
Brady & Martin  
Bryce & Gunn, R.  
Burgoyne, Burbridge & Co.  
Burroughs, Wellcome & Co.  
Chassaigne & Co.  
Delacere, Ch., & Co.  
Duncan, Flockhart & Co.  
Ferris & Co.  
Fletcher, Fletcher & Co.  
Giles, Schacht & Co.  
Hearon, Squire & Francis  
Hewlett & Son  
Howards & Sons  
Jeyes' Sanitary Compounds Co.  
Keith & Co. (Conc. Tinctures)  
Lambert Pharmaceutical Co.  
May & Baker, Lim.  
Moss, J., & Co.  
Potter & Clarke  
Richardson, John, & Co. (Lei-  
cester), Lim.  
Smith, T. H., & Co.  
Southall Bros. & Barclay  
Sutton, W., & Co.  
Syms & Co.  
Tyler, T., & Co.  
White, Alfred, & Sons  
Woolley, Sons & Co.  
Wyeth, Jno., & Bro.  
Zimmermann, A. & M.**PHOTOGRAPHIC**Artistic Photo Co.  
Barclay & Sons, Lim.  
Blackfrans Photographic Co.  
Boehm, Fredk.  
Botwright & Grey  
Burroughs, Wellcome & Co.  
Darton, F., & Co.  
Fuerst Bros.  
Howards & Sons (Chemicals)  
Orme, J., & Co.  
Perken, Son & Rayment  
Tyler, T., & Co.  
White, Alfred, & Sons  
Zimmermann & Co.**PILLS (Coated, &c.)**Allen & Hanbury  
Anderson Apothecaries' Hall  
Becham, Thomas  
Blyton, Astley & Co.  
Bromley, C. (Gout & Rheu.)  
Burgess, E.  
Burgess, E., Jun.  
Clay, Dod & Co.  
Davidson & Gray  
Dennis, H. J.  
Dr. Williams'  
Eade & Gout Pills  
Evans, Sons & Co.  
Harrowell Pill Co.  
Hearon, Squire & Francis  
Hill, A. S., & Son (Holloway's)  
Lloyd, T. Howard & Co.  
McKesson & Robbins  
Newbery, F., & Sons  
Richardson, J., & Co., Lim.  
Wand, S. (Pearl Coated)  
Warner, W. R., & Co. (Coated)  
Wyeth, J., & Bro.**PILL MACHINES**Finlay, J. W.  
Toogood, W. (Coater)  
Werner & Pleiderer



**PLASTERS**

St. Dalmas, A.  
Evans, Sons & Co.  
Johnson & Johnson  
Seabury & Johnson

**PODOPHYLLIN, &c.**

Keith, B., & Co. | Smith, T.

**POLISHING**

Bradley & Bourdas (Albatum)  
Chancellor & Co.  
Fletcher, Raybould  
Fordham, W. B., & Sons, Lim  
Oakley, John, & Sons

**PORCELAIN GDS**

Tookood (E.C. Pots, regist.)

**POULTRY FOOD**

Spratt's Patent, Lim.

**PRECIP. CHALK**

Levermore, Aug., & Co.  
Mason, A. H., & Son

**PRINTING**

Bowers Bros.  
Cowan, J. R. (Glasg)  
Ford, Shapland & Co.  
Silverlock, H.  
Taylor Bros. | Townsend, J.

**PUMILINE**

Stern, G. & G.

**QUININE SALTS**

Boehrer, C. F., & Sohne  
Howards & Sons  
Zimmermann, A. & M.

**RECIPES**

Brooks, T.

**RENNET**

Duncan, Flockhart & Co.

**RUBBER**

Maw, S., Son & Thompson  
Tyer Rubber Co.  
Victoria Rubber Co.  
Warne & Co.

**SACCHARIN**

Allen & Hanburys  
Burroughs Bros.  
Burroughs, Wellcome & Co.

**SALICIN**

Macfarlan & Co.  
Smith, T. & H., & Co.

**SALICYLIC ACID**

Burgoyne, Burdidge & Co.  
Fuerst Bros. | Kuhn, B.  
Zimmermann, A. & M.

**SALT**

Stern, G. & G. (Pepsalia)

**SAUCES, PICKLES**

Goodall, Backhouse & Co.  
Mason, G., & Co., Lim.  
Tyrer, P.

**SCHOOLS, &c.**

City School of Chemistry and  
Pharmacy, Lim.  
Liverpool School of Pharmacy  
London Homeopathic and  
Medical School  
Manchester Col. of Pharmacy  
Northern School of Pharmacy  
Sheffield School of Pharmacy  
South London School of  
Pharmacy, Lim.  
The School of Pharmacy  
Westminster College

**SEEDS**

Potter & Clarke

**SELTZOGENES**

Brath & Hinchliffe, Lim.  
British Syphon Co.  
Evans, Sons & Co.  
Fordham, W. B., & Sons, Lim.  
Gerant, E., & Co.  
May, Roberts & Co.

**SHAVING**

Howden & Sons (Euxesia)  
Lloyd, Mrs. A. S. (Euxesia)

**SHEEP DIP**

Fletcher Bros. & Co.  
Jeyes' Sanitary Compounds Co.  
Tomlinson & Hayward  
Wandsworth Chemical Works,  
Lim.

**SHOP FITTERS**

Bowling & Govier  
Bygrave, J. & W.  
Howlett, S. | Josephs, P.  
Natali & Co. | Natali, E.  
Pothe, H., & Co.  
Treble, G., & Co.

**SOAP**

Ayrton & Saunders  
Barclay & Sons, Lim.  
Blondeau et Cie. (Vinolia)  
Bronley, H., & Co.  
Calvert, F. C., & Co.  
Cleaver, F. S., & Son  
Cook, E., & Co.  
Dodd Bros.  
Fordham, W. B., & Sons, Lim.  
Jeyes' Sanitary Compounds  
Muhlen, F. [Co.  
Pears, A. & F., Lim.  
Price, Napolcon, & Co.  
Wright, Layman & Umney

**SODIUM PEROXID.**

Burton, W., & Sons

**SPECTACLES**

Botwright & Grey  
Dartton, F., & Co.  
Perken, Son & Rayment

**SPONGES**

Cresswell Bros. & Schmitz  
Evans, Sons & Co.  
Peterson, M., & Co.

**STAMPS (RUBBER)**

Hickisson, J.

**STARCH**

Chancellor & Co. (Mack's)  
Critchley (Gloss) [Doubie]

**STOPPERS**

Austin & Co. (Sprinklers)  
Barnett & Foster | Melin, C.

**STOVES**

Clark, S., & Co., Lim.

**SUGAR**

Blyton, Astley & Co.  
Fletcher, Fletcher & Stevenson  
Gilson, K., & Sons

**SUGAR OF MILK**

Boehm, Fredk.  
Burroughs Bros.

**SULFONAL**

Burroughs, Wellcome & Co.  
May & Baker, Lim.

**SURGICAL**

Ayrton & Saunders  
Bailey, W. H., & Son  
Barclay & Sons, Lim.  
Brady & Martin  
Cocking, J. T.  
Haywood, J. H.  
Krohne & Sesemann  
Liverpool Patent Lint Co.  
Powell & Barstow  
Quelch, H. C.  
Richardson, John, & Co. (Leicester), Lim.  
Robinson & Sons  
Schutze, F., & Co.  
Tyer Rubber Co.  
Victoria Rubber Co.  
Wood, Vincent

**SYPHONS**

Barnett & Foster  
Brath & Hinchliffe, Lim.  
British Syphon Co.  
Fordham, W. B., & Sons, Lim.  
Idris & Co., Lim.  
Kilner Bros. | Melin, C.

**SYRUPS**

Blyton, Astley & Co.  
Fletcher, Fletcher & Stevenson  
Idris & Co., Lim. [(Liquors)]

**TABLETS**

Blyton, Astley & Co. (Sulphur)  
Cowan, J. R. (Advertising)

**TEA**

Gt. Tower St. Tea Co.

**TEETHING PADS**

Marriott, F., & Co.

**THERMOMETERS**

Blyton, W. H., & Son  
Barclay & Sons, Lim.  
Dartton, F., & Co.  
Evans, Sons & Co.  
Hicks, J. J.  
Newbery, F., & Sons  
Perken, Son & Rayment

**TINCTURES**

Hewlett, C. J., & Son

**TINS & CANISTERS**

Gilbert, J. A., & Co.

**TOILET**

Allen & Hanburys (Chrlsma)  
Burroughs, Wellcome & Co.  
Dre Oil Co., Lim. [(Lanoline)]  
Hovenden & Sons  
Quelch, H. C.  
Truett, H. P., Lim.

**TOOTH BRUSHES**

Maw, S., Son & Thompson

**TOOTH PASTE**

Anglo-American Drug Co.,  
Beecham, T. [Lim.]  
Jewsbury & Brown  
Sutton, O., & Co. (Block)  
Wilson, A. (Bunter's)  
Woods, M. (Aroca)

**TRADE MARKS**

Browne, T. B.

**TRUSSES**

Bailey, W. H., & Son  
Evans, Sons & Co.  
Haywood, J. H. | Wood, V.

**URETHANE**

Howards & Sons

**VACCINATION**

Sanitary Wood-wool Co., Lim.  
(Shield)

**VACCINE ASSOCIATION (Lymph)****VALUERS & TRANSF AGNTS**

Andros & Co.  
Berdoo & Co. | Brett, F. J.  
Crocker, G. B., & Co.  
Orridge & Co.

**VASELINE**

Chesebrough Co.

**VETERINARY**

Bird & Storey | Day & Son  
Jay, Son & Hewitt  
Flinman, Sons & Co.  
James, W. H. (Hesters)  
Jeyes' Sanitary Compounds Co.  
Lloyd, T. Howard, & Co.  
Rookledge, P. E.  
Spratt's (Dogs)  
Walkers, Troke & Co.

**VINOLIA (Superftt'd)**

Blondeau & Cie.

**WEED KILLER**

Acme Chemical Co., Lim.

**WHOLSL & EXPRT DRUGGISTS**

Allen & Hanburys  
Allen, Stafford, & Sons  
Barron, Harveys & Co.  
Brady & Martin  
Burgoyne, Burdidge & Co.  
Bush, W., & Co.  
Bush, W. J., & Co.  
Clay, Dod & Co.  
Delacere, Ch., & Co.  
Evans, Sons & Co.  
Evans, Lescher & Webb  
Fassett & Johnson  
Ferris & Co.  
Fox, W., & Sons | Graf, P.  
Goodall, Backhouse & Co.  
Harker, Stagg & Morgan  
Hearn, Squire & Francis  
Hewlett & Son  
Hill, A. S., & Son [Clarke]  
Hodgkinson, Treacher &  
Lloyd, T. Howard, & Co.  
Lothouse & Saltmer  
Macfarlan, J. F., & Co.  
Murdoch, J. R., & Co.  
Potter & Clarke  
Richardson, J., & Co.  
Symes & Co.  
Thompson & Capper  
Walkers, Troke & Co.  
Willows, Francis & Butler  
Woolley, Jas., Sons & Co.  
Wright, Layman & Umney  
Wyleys (Lim.)

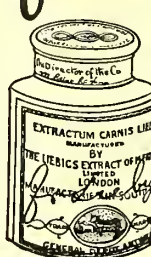
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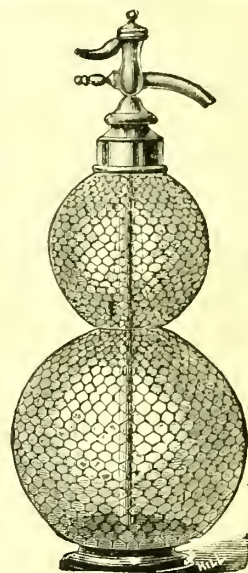
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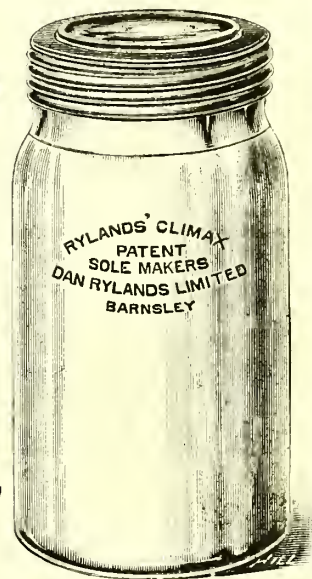
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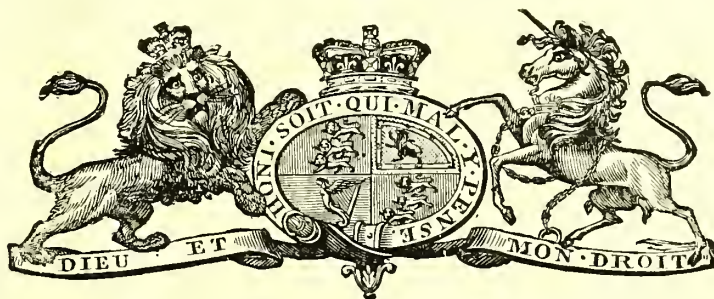
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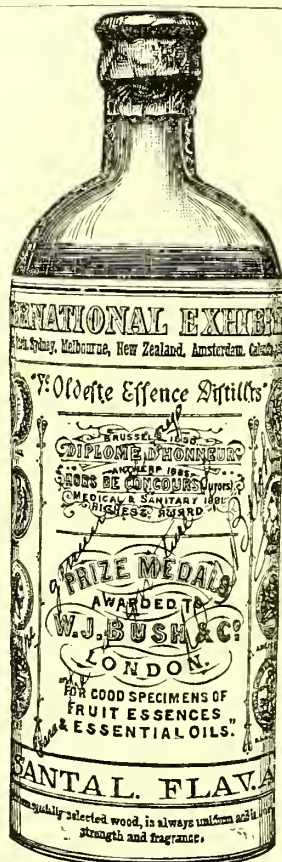
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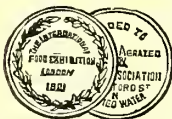
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HIGHEST PRIZE MEDAL,



BRADFORD, 1882.

Year	No. of Members	Dividend
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1879	350	None
1880	430	None
1881	540	None
1882	615	3½
1883	708	5
1884	908	6
1885	1,193	6

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1887	1,612	7½
1888	1,892	5
1889	2,031	7½
1890	2,088	8½
1891	2,134	10
1892	2,312	10 %

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LIEBIG'S BEEF WINE.

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From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

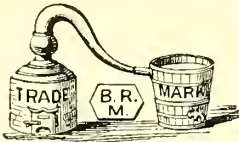
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).  
December 15, 1888.

Introduced 1855.]

## ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.

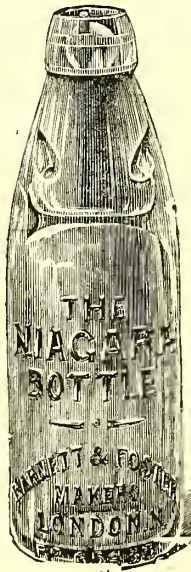
One ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.



Aqua Anethi, Corcent., 4 lb.	Aqua Cinnam. Ver., Corcent., 6 lb.	Aqua Fanculi, Corcent., 4 lb.	Aqua Pimentæ, Corcent., 4 lb.
" Anisi " 4 " "	" Cassia " 4 " "	" Menth. Pip. " 4 " "	" Rosæ " 8/6 "
" Camphoræ " 4 " "	" Flor. Aurant. " 8/6 "	" " Ang. " 6 " "	" Rosæ Virgin. " 10/6 "
" Carui " 4 " "	" Flor. Sambuci " 8/6 "	" " Virid. " 4 " "	

The above are put up in Bottles of 1/2 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork. From the LANCET, July 15, 1884:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam., Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice."

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d. Sample Bottles, dozen parcels .. ..	5/3	6/3	1/2 Bottles, flat or round, reputed half-pints ..	16/-	26/-
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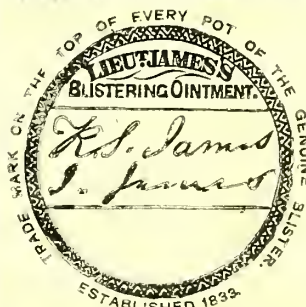
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Essence 1/6	==	==	Per dozen, 15/-, less 10 per cent.	Liniment 1/9	==	==	Per dozen, 20/-, less 10 per cent.
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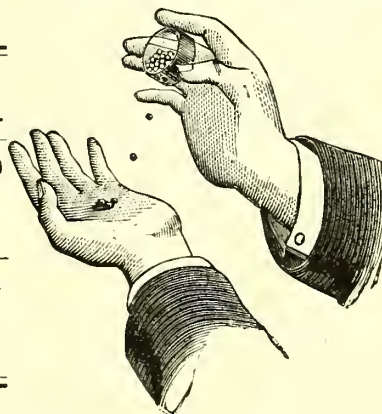
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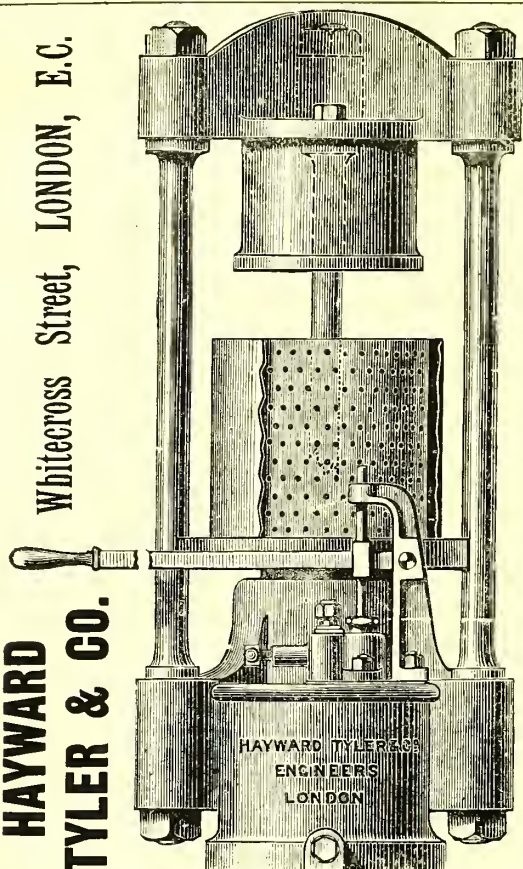
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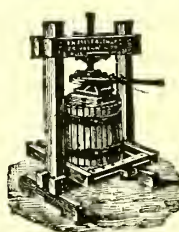
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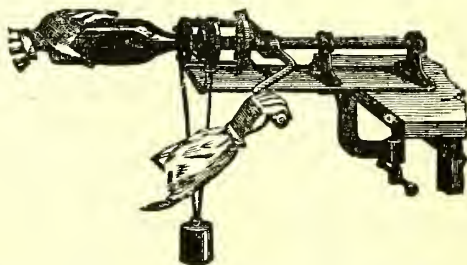
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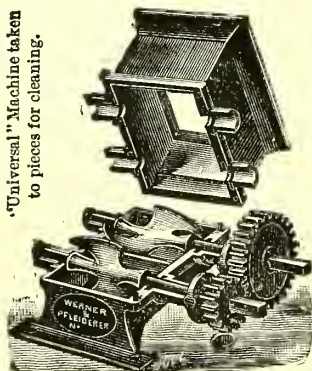
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INFLUENZA, AND OTHER CHEST AFFECTIONS.

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The recognised expositor of the principles on which the Board of Inland Revenue acts in interpreting the Medicine-stamp Acts.

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Invaluable to candidates preparing for the Preliminary Examination.

## SCIENTIFIC MYSTERIES.

A 1s. illustrated book for chemists to sell to the public. 8s. 6d. per dozen.

## PHARMACY AND POISON LAWS OF THE UNITED KINGDOM. (2s. 6d.)

A complete digest of the Acts governing the practice of pharmacy, with notes on all the principal decided cases. The above books can be obtained through any of the wholesale drug, sundries, and patent-medicines in London or the provinces at the published price.

## Summary.

A NEW Pharmacy Bill is before the French Chamber of Deputies, and our Paris correspondent reports progress concerning it.

THE official program ne of the meetings the British Pharmaceutical Conference on August 14, 15, 16, and 17 is published in this number.

LEWIS'S, of Liverpool, Manchester, and Birmingham, have registered the drug departments of their business in these cities as a limited company.

THE present scarcity of Cape and Curacao aloes has been made the basis for an Editorial article on these varieties of the drug, in which the market fluctuations of the last eighteen years are treated in detail.

THE latest instalment of Dr. Murray's gigantic dictionary throws fresh light upon the derivation of many pharmaceutical and medical terms. The etymology of these words is discussed in our Editorial comments.

AN Irish grocer sold a halfpennyworth of arsenic to a child unlabelled. The Elphin Magistrates, before whom the case was brought, fined the grocer 1s. and 2s. costs. The Pharmaceutical Society will take the case to a higher Court in order to compel the imposition of a 5*l.* penalty.

THE Pharmaceutical Council have appointed Mr. H. G. Greenish, who for three years has acted as demonstrator of materia medica, to the Professorship of that subject. Mr. Ince, who for many years has conducted a pharmacy class under the auspices of the Society, is now officially designated "Lecturer in Pharmacy."

OUR special representative now in Chicago sends us further notes on the Exhibition, dealing mainly with British exhibits. These will be found in a special article. Our correspondent's admiration of the manner in which the British Commissioners have fulfilled their functions has not increased by further experience.

OUR Legal Reports this week include several more vinegar cases, and a cocoa and a coffee prosecution under the Sale of Food and Drugs Act. In the last the Liverpool Stipendiary decreed that coffee 55 and chicory 45 per cent. was an unfair mixture to sell at 1s. 4*d.* per lb. We also give some fuller details of the spirit-of-nitric case reported last week.

IN the drug-markets extreme quiet reigns. On Thursday no public sales of any kind were held, the London Commercial Sale Rooms were closed, and Mincing Lane, always eager for a holiday, was deserted. The Royal Exchange, shorn of its customary daily internal adornment by druggists, chemical-merchants, and oil-dealers, was decorated externally by banners, arms, and illuminatory devices.

In our Correspondence section Dr. William Johnstone returns to the question of the legal definition of vinegar, representatives of Nottingham and Newcastle-on-Tyne keep the medicine-stamp sore open, Dr. John Roche deals with arsenic-poisoning (aiming apparently to demonstrate the injustice of the sentence on Mrs. Maybrick), Mr. William Kirkby, of Owens College, Manchester, discourses on the meaning of the term "pharmacology," and we answer a great number of miscellaneous inquiries.

## OUR SUMMER ISSUE.

WHOLESALE and manufacturing firms who may wish to bring themselves and their products before the best constituency of chemists and druggists at home and in the colonies are requested to note the opportunity which will be provided in our Summer Issue on July 29. For insertion in that issue we are prepared to receive specially printed insets the same size as THE CHEMIST AND DRUGGIST pages, and we shall distribute the issue to 11,000 of the best houses and buyers in the English-speaking drug trade. The publisher will be glad to furnish particulars to any who wish further information regarding the Summer Issue.

## English News.

*The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.*

### A Chemist's Scales.

At the Stratford Borough Police Court, last week, George Morris, chemist, of 215 Leytonstone Road, was summoned for having in his shop, on June 9, a stand beam scale, which was  $3\frac{1}{2}$  drachms against the purchaser. Mr. Bowen proved the case, and defendant pleaded that his lad had been cleaning the scale and must have dropped a piece of chain. Fined 20s. and costs, and the Magistrate ordered the beam to be destroyed.

### Store Prices.

The Civil Service Supply Association announce reductions as follows: Chamomile-flowers from 1s. 11d. to 1s. 9d. per lb.; Eno's Fruit Salt from 1s. 11d. to 1s. 9d.; gazogene and seltzogene powders (5-pint size) from 2s. 1d. to 2s.; glycerine pastilles from 2s. to 1s. 11d. per lb.; Himrod's Asthma Cure from 2s. 9d. to 2s. 7d.; Montserrat lime-juice from 11d. to  $10\frac{1}{2}$ d., and limetta cordial from 1s. 1d. to 1.  $0\frac{1}{2}$ d.; chlorate of potash lozenges and ipocacuanha lozenges from 2s. to 1s. 10d.; ginger lozenges from 1s. 11d. to 1s. 10d.; rose lozenges from 2s. to 1s. 11d.; compound sulphur lozenges (Dr. Garrod's) from 1s. 6d. to 1s. 4d. per lb. and from 2d. to  $1\frac{1}{2}$ d. per oz.; dried orange-peel from 2s. 3d. and 3s. 2d. to 1s. 11d. and 2s. 6d. per lb.; and quassia chips from  $4\frac{1}{2}$ d. to 4d. per lb. Advances are ivory cream from 11d. to 1s. 2d.; Géraudel's pastilles from 11d. to 1s., and Althaea soap from 2s. 2d. to 2s. 4d. per 12 tablets. Rooke's elixir and pills and Crosby's elixir are taken out of stock.

### The Market Electrician.

At the Woolwich Police Court, on Friday, Frank Smith, scientific-instrument dealer, of 33 Church Street, Woolwich, was summoned by the Woolwich Local Board of Health for obstructing the market-inspector (Enoch Hunt) in the execution of his duty. Mr. Hughes, M.P., prosecuted, and stated that the defendant was charging for electric shocks, and rang bells to attract the public attention on Saturday, June 24. Some of the bells were rung by electricity and four were rung by hand. Hunt removed the barrow, but the defendant took it back and continued the turmoil. Evidence was given, and the defendant declared that the inspector had a spite against him, and knew about the bell-ringing when he received the toll-money. He lost 10l. by Hunt taking away his barrow and goods. A local tradesman said the bells were a great nuisance, and Mr. Marsham inflicted a fine of 5s. and costs.

### Disinfectants for London.

The London County Council have accepted the tenders of Messrs. J. L. Wade & Co. (Limited), Messrs. Mackey, Mackey & Co., the Sanitas Company (Limited), and Tuson's Disinfectants Company (Limited), for the supply of disinfectants required for use during the year ending June 30, 1894.

### Poisoning Tragedies.

Ellen Vernon Roberts, 25, of Bagillt, being alone in her parents' house on June 30, sent a neighbour's child to the shop of Mr. Gratton Thomas, chemist, for sixpennyworth of rat-poison. She mixed it with some milk, locked the door of the house, and lay down on the sofa, where she was found dead. An inquest on the death was opened on Saturday and adjourned.

Mrs. Willmot, Leicester, died through drinking liquid ammonia. She was ill, and in bed; and the jury could not come to a conclusion whether she drank the ammonia in mistake for her medicine, or whether she took it intentionally. The bottle of ammonia was labelled "Poison," and was kept in a drawer.

The Birmingham Coroner held an inquest, on Friday last, on the body of Clifford Mark Morton, 2, who had died in the General Hospital. His death was caused by drinking a quantity of sulphuric acid which had been kept in

the cupboard of his father's house in a ginger-beer bottle. The jury returned a verdict of death by misadventure.

The children of four Porthawl (Cardiff) families have been poisoned through eating henbane-seeds. They have recovered under medical treatment.

Emma Bolton, 45 years old, wife of William Henry Bolton, dock labourer, 10 Wood Street, Birkenhead, had been in low spirits for some time, owing to the death of her two daughters, which took place a short time ago within a few days of each other. On Monday last she purchased a bottle of carbolic acid from Mr. Cookson, chemist and druggist, Price Street, Birkenhead, and swallowed some of the contents during her husband's absence. She died before a doctor could be brought to her assistance.

### Doubtful about the Disinfecter.

In a report by the medical officer of Poplar and Bromley, which will come before the Poplar District Board of Works at its next meeting for discussion, the medical officer refers to the disinfection of clothing, &c., and lays stress on the fact that the process should be thorough and complete, as otherwise no protection from infection can be secured. With the Board's disinfecting apparatus at Poplar he has, he says, found it difficult to obtain a heat sufficient to ensure the destruction of organic germs, and he recommends the adoption of a method of dry steam, by which the most perishable materials will not be injured, as they now sometimes are, in getting up the required heat, and by means of which there would be a certainty of disinfection with more rapid action.

### Mr. Fernando's Troubles Continue.

On Tuesday, in the City of London Court, before Mr. Commissioner Kerr, the case of Farina v. Fernando was heard, in which the plaintiff, Mr. Johann A. Farina, of 9 Coleman Street, E.C., applied to enforce payment of 1l. for goods supplied to the order of the defendant, Mr. Frank Fernando, chemist, 3 Victoria Buildings, Victoria Station. The defendant offered to pay 10s. per month. He said he really could not pay any more. Mr. Commissioner Kerr said the defendant had already been ordered to pay 10s. per month, but the order had not been obeyed. The defendant said that was because he broke his collar-bone and one of his fingers. He had several other orders against him. Mr. Commissioner Kerr said he would make a fresh order for the defendant to pay 10s. per month, but it must be paid.

### Cricket.

On Saturday last, the return match between the employés of Messrs. James Woolley, Sons & Co., Manchester, and Messrs. R. Sumner & Co., Liverpool, took place at Belle Vue Gardens, Manchester. The home team closed their innings with the score at 79 for 8 wickets. To this total Mr. Dunn contributed 42. The Liverpool players responded with a total of 40 for their 10 wickets. The teams subsequently took tea together. Mr. Lane, of the Manchester house, officiating as chairman.

### Drug-contract.

The Coventry Union Board of Guardians have appointed Mr. Bones, chemist and druggist, to supply drugs to the Union for the ensuing six months.

### Stealing from Chemists.

At the Monmouthshire Quarter Sessions last week a domestic servant named Hannah Maria Cottrell, aged 21, was charged with stealing 15l. belonging to her master, Mr. Thomas Yendall, chemist, Risca. During the absence of the prosecutor and his wife on May 22, the prisoner broke open a drawer in a bedroom, took out the money, and concealed it behind the kitchen dresser. She then left the house, and did not return until after her master and mistress had got home. Prisoner's defence was that it being fair-day, and having permission to go out, she did not like to leave the money in the drawer, and so she hid it behind the dresser for the sake merely of safety. The jury found her guilty, but recommended her to mercy on account of her previous good character, and she was sentenced to one month's imprisonment.

Charles Woods, 21, a porter, was charged at the Eastbourne Police Court last week with stealing twelve cakes of



of the Pharmaceutical Council, on the ground that the employer did not own or personally conduct the establishment where the assistant was employed.

#### Personal.

Mr. E. P. Murray, M.P.S., of Clones, has been recently raised to the magisterial bench by the Lord Chancellor.

Mr. M. R. Whitla, M.P.S., Secretary of Masonic Lodge 55, Monaghan, was recently presented by his brethren with a handsome Masonic outfit and regalia, on the occasion of his appointment as representative from the Grand Lodge of Delaware to the Grand Lodge of Ireland.

#### Licence Examinations.

Fourteen candidates presented themselves for the Licence Examination of the Pharmaceutical Society on Wednesday, Thursday, and Friday. The result is not yet known.

#### Fined 1s. for Selling Arsenic Illegally.

At Elphin Petty Sessions, on June 28, a grocer named Kelly was prosecuted under the Poisons Act, and also under the Pharmacy Act, by the local police, for having sold arsenic to a child, he not being qualified to do so. The evidence showed that a little boy, 12 years old, was supplied by Kelly with a halfpennyworth of arsenic unlabelled, which he handed to his father, who used a small saucepan to dissolve it in for some use or other. The mother, finding out that her husband had been using arsenic, became alarmed, and, thinking he had poisoned himself, reported the matter to the police, who instituted proceedings. The Magistrates inflicted the fine of 1s., with 2s. costs. Notice of appeal was at once given on behalf of the Pharmaceutical Society, who claim a 5*l.* penalty.

## Scotch News.

#### Extract-of-malt Bread.

An action has been raised in the Court of Session by John Montgomerie, 361 Dumbarton Road, Partick, against William Paterson, manufacturing chemist, Maryhill, Glasgow, and Paterson's Chemical Manufacturing Company (Limited), 43 West Regent Street, Glasgow, for reduction of letters patent granted in favour of William Paterson for a new or improved process for the manufacture of bread and the like with extract of malt. The plaintiff says he is the patentee and proprietor of an invention relative to improvements in and connected with the manufacture of bread and biscuits, and that in November of last year the defendant Paterson, who is manager of Paterson's Chemical Manufacturing Company (Limited), applied for a patent for the manufacture of malted bread, his specification being on the lines of the plaintiff's specification. The plaintiff pleads that the defendant's invention is not new or original, and it cannot be worked without infringing the plaintiff's letters patent. The defendant says the plaintiff's statements are unfounded in fact, and that the letters patent are valid.

#### Mr. F. W. Powell's Estate.

An inventory of the estate of Frederick William Powell, formerly partner in the firm of Messrs. Dunnean, Flockhart, Powell & Co., chemists, Leith, and of 3 Bright's Crescent, Edinburgh, who died on March 3 last, has been lodged in Commissary Clerk's Office, Edinburgh. The net amount of personalty is 13,122*l.* 5*s.* A large portion of this consists of bank-stocks, made up as follows:—National Bank of Scotland, 3,400*l.*; British Linen Company Bank, 1,059*l.*; Commercial Bank of Scotland, 1,608*l.*; Union Bank of Scotland, 1,592*l.* 10*s.*; and Clydesdale Bank, 3,517*l.* 8*s.* 9*d.* There are also shares in the Scottish-American Investment Company of the value of 5,714*l.*, and smaller amounts are represented in the shares of other companies. Household furniture, pictures, &c., are valued at 1,162*l.*; and, with the exception of these, the testator's will directs that the whole estate be realised, and, subject to some small charges, the proceeds divided equally among all his children.

## French Pharmaceutical News.

(From our Paris Correspondent.)

**THE PARIS RIOTS.**—At the Eleventh Correctional Chamber on Wednesday, M. Bouvier, pharmacy student, was sentenced to ten days' imprisonment for having insulted a policeman in the Boulevard St. Michel during the serious rioting of the previous night. The benefit of the Bérenger (first offenders) Act was refused to him, as well as to the medical and other students condemned at the same time.

**MISSION TO CHICAGO.**—M. Ernest Hecht, Doctor of Law, has been charged by the Ministry of the Colonies with a mission to the Chicago World's Fair. The object will be to study the natural products, including drugs, &c., of the tropical colonies of other countries, with a view to comparing them with those produced in the colonies of France.

**ADULTERATION OF MEDICINES.**—A few weeks ago M. Brachat, a pharmacist of Bordeaux, was summoned in that city on the charge of having adulterated certain medicaments. He was sentenced to a month's imprisonment and a fine of 50*f.* The Bordeaux Syndicate of Pharmacists appeared as plaintiffs and were awarded the nominal sum of 1*f.* as damages. Not being satisfied with the results of the trial, M. Brachat appealed, unfortunately for himself; for at the hearing of his appeal, on June 23, the sentence of the lower Court was not only confirmed as regards the fine and damages, but the term of incarceration was prolonged to two months. M. Brachat has also to pay the expense of advertising the judgment in three local newspapers.

**ALLEGED ILLICIT DISTILLING.**—Last Friday the Police Commissary of the Ternes quarter of Paris arrested, at the request of the Inland Revenue Department, a pharmacist named Pény, residing in the Rue Ruhndorff, on the charge of keeping an illicit still. The pharmacist was fortunately able to give satisfactory explanations, and the specimens seized on his premises showed that he was merely engaged in the manufacture of pharmaceutical preparations, consequently he was discharged. It seems that the Syndical Chamber of Distillers were partly responsible for the arrest, as they had lodged a complaint against M. Pény, charging him with fraudulent competition. The pharmacist is now considering the question of suing for damages for unlawful arrest.

**THE PARASITES OF PHARMACY.**—In view of the tendency of certain pharmacists to open shops as a speculation, the Syndical Chamber of Pharmacists of the Seine has passed the following resolution:—

The principal object of the Syndical Chamber is to watch over the security of its members and to protect them against the parasites of the profession, whether they are foreign to pharmacy or not. The multiple installations created by certain pharmacists constitute a parasitical act of the worst kind which can in no way be considered compatible with the spirit of the law. On this account the Syndical Chamber gives notice that no pharmacist who is known to open pharmacies either in Paris or the provinces as a speculation, can in future be admitted as a member.

**THE NEW PHARMACY BILL** came up for second reading in the Chamber of Deputies last Tuesday. Articles 1 to 16 were adopted without discussion, but, in Article 17 M. Jules Roche objected to the hospitals in country districts being deprived of the pharmacies which they now possess. The Reporter in charge of the Bill explained that all small hospitals will obtain their supplies of medicaments from the pharmacists of the locality; in fact, every pharmacist will be bound to supply the hospitals and public dispensaries with the drugs and medicines required for the indigent poor, the conditions and prices of which will be settled by a special tariff. M. Roche replied that it will be impossible to forbid the pharmacists of small hospitals from selling medicaments, and asked that the Article 17 be sent back to the Commission. This was agreed to with alacrity, the small number of twenty-five deputies present at the time being probably more anxious to escape from the tropical heat of the Chamber than to discuss the interests of pharmacy. The French Parliament has now the Budget for 1894

under discussion, so that pharmaceutical projects have again retired to the background. With the possibility of serious social trouble ahead, there is a likelihood of their remaining there.

## Foreign and Colonial News.

**MEDICAL GOODS FOR CEYLON.**—According to a Customs return just published, the value of the imports of medicines into the island of Ceylon in the year 1892 was 21,157l. Perfumery was imported to the extent of 4,466l., soap to that of 7,516l., and lubricating and vegetable oils to that of 8,928l.

**GREEK SULPHUR.**—The mineral resources of the Greek island of Milo are very important, and include excellent sulphur, which is obtained in powder and of which the quality is far superior to that derived from Sicily (roll sulphur) which is imported into Greece. All the Milo sulphur is sent to the Peloponnesus, where it is used chiefly in the treatment of the vines against the oidium. The annual output is 2,000 tons.

**THE LIQUORICE-ROOT TRADE.**—The export trade in liquorice root from Aleppo (Asia Minor) has largely developed during the last few years, and goes on growing. Collection is now made on a large scale throughout the province, thus compensating the peasantry in some degree for the losses caused by bad harvests. 6,145 tons, valued at 43,231l., were exported to the United States in 1892, as compared with 4,293 tons, valued at 28,077l., in 1891.

**THE INTERNATIONAL MEDICAL CONGRESS.**—The eleventh International Medical Congress is to assemble in Rome on September 24, and will be opened by the King of Italy. Professor Guido Baccelli, ex-Minister, will preside, and the work of the Congress will be divided amongst nineteen sections. The number of those who have already announced their intention of being present exceeds the attendance at the last Berlin meeting. The Government and the municipality of Rome are preparing entertainments in honour of their foreign guests.

**OPIUM-PRESERVING IN WEN-CHOW.**—Our consul at Wen-chow, in China, mentions a singular manner of preserving opium which prevails in his district. "The method of collecting the juice in vogue here," he says, "is for one man to slice with a downward stroke the skin of each capsule, while several other men go round with bamboo scoops to scrape off the juice that exudes. No capsule is sliced twice on the same day, and the largest capsules will only bear six slicings. Moreover, the juice of the first two slicings is far better than that of the later ones. In fact, the wealthier farmers here put aside the juice so collected, and, after drying it (it is not boiled) several days in the sun, store it away in the shells of goose eggs in some dark place for three years. It is said to be then superior to any Indian drug. Native opium, in any case, should never be used in its first year; at the very least a summer should be allowed to pass."

**A DENTIST WANTED IN MALTA.**—The U.S. Consul in Malta reports that he is constantly receiving inquiries from American dentists asking whether there are any laws in Malta regulating the practice of dentistry, and whether there would be an opening for an American dentist. The consul thinks that there is such an opening, and that the time is ripe for the establishment of a really first-class man in Malta. He says "there is not a really first-rate dentist in the Maltese Islands; but, such as they are, they do a very considerable business. Lots of dental work goes away from the island that would be done there if the local dentists were skilful in modern dentistry. Their charges are high and their work inferior, as are the tools they use. The population of the Maltese Islands is upwards of 170,000 natives, and the English garrison, fleet, and residents swell the number to 185,000." The dentist must be possessed of a British qualification, or, if he has none, must show that he knows his business and must submit himself to a local examination.

**EUROPEAN MEDICINES IN CHINA.**—The British consul at Swatow (China) reports that among the minor imports of foreign origin into his port during the year 1892 medicines

show a large increase. Of the 61,863 taels spent in articles under this heading, 2,317 taels were for European drugs. The balance were Chinese concoctions from the Straits and elsewhere. Adding to this balance another 143,087 taels for Chinese drugs imported from other parts of China, it will be seen that in the past year foreign medicaments were only 1 per cent. of the total import. Nevertheless, there is hope for the Western medicine-man, as the Chinese are avid consumers of all kinds of drugs, and to judge by the advertisement-sheets of the vernacular press, where medical puffs fill half the space, the drugs most in demand are anti-opium specifics and aphrodisiacs. The British consul at Kiung Chow (China), in writing about the coasting trade between his port and Hong-Kong, says that much of that traffic consists of native medicines, notably the artemisia-plant, or mugwort, which makes punk used for cauterising, and moxa, a word which is apparently derived from the Japanese *moe-gusa*, "burning herb." Mixed with castor oil this moxa-punk makes red ink-paste for seals. Ai-fên, or artemisia-powder, is a kind of camphor, said to be distilled from the leaves of the mugwort. It is used as medicine.

**THE ALLEGED TAINTING OF THE DRINKING-WATER IN NICE.**—The travelling Britons whose propensity for writing letters to the *Times* about their actual and fancied discomforts in foreign lands provides that worthy journal with so much cheap copy during the slack season will be glad to hear from the British consul at Nice that their complaints about the alleged contamination of the Nice drinking-water by the water of the Vesubie river, which is used for irrigation and other purposes, have led to a thorough investigation of that supposed pollution by the Nice authorities. These investigations have conclusively proved the complaints to be unfounded. The Vesubie pipes were, by order of the Municipality, all suddenly closed without producing any diminution of pressure in the supply of the St. Thécle spring, which furnished the drinking-water of Nice. Then the St. Thécle pipes were closed in their turn without producing any difference of pressure in the Vesubie pipes. To make assurance doubly sure, however, the authorities procured samples of the St. Thécle water at its source, as supplied to the town of Nice, and also samples of undoubted Vesubie water. These samples, hermetically sealed, were sent to the pharmaceutical laboratory of the 15th Army Corps at Marseilles and there analysed. The result was perfectly satisfactory as to the non-admixture of the two sources; in none of the St. Thécle samples was any taint of river-water found, and the verdict given was that all the St. Thécle samples contained the same good drinking-water.

**THE PREPARATION OF HASHEESH.**—Assistant-Surgeon Asutosh Ghose, writing in the *Indian Agriculturist* on *majoom* or *hasheesh*, thus describes its preparation:—*Majoom* is prepared from the leaves, tops, and tender parts of the plant called *Cannabis Indica* or *Sativa*. Four ounces of such parts of the plant are taken, free from unripe fruit, flowers, or other impurities. They are thoroughly washed, and 3 oz. of pure butter added to the leaves, with about 4 oz. of water. All these ingredients are put together in an earthen pot over a slow fire. The water is allowed to evaporate, leaving in the pot the buttered leaves, which are now strained through a piece of muslin. The strained greenish extract is removed, with great care, the other impurities on the muslin being thrown away. The extract is then washed with pure water twice. In another pot about 16 oz. of sugar, with 32 oz. of water, and a little milk, are boiled. By repeated boiling and mixing of milk a syrup is prepared. In this syrup, the greenish, oily extract is put, and boiled on a slow fire. Now is the time to mistify the preparation. Some add *dhatūra* seeds; others nux vomica seeds in finest powder. But the usual practice in Bengal is to add a few drops of otto of roses, or a few grains of musk, powdered cardamom seeds, and sometimes a minute quantity of opium. After boiling half-an-hour, the whole mass is poured into a flat basin. It solidifies, and is cut into cakes. Sometimes the best *hasheesh* is sold at sixteen rupees a seer, but usually the price is four rupees. *Hasheesh* is the Arabic *hashish*, which means "green, intoxicating liquor," probably derived from the Hebrew *shesh*, which means "to be joyous."

**THE MANUFACTURE OF SOY IN CHINA.**—The manufacture of soy and beancurd is one of the most flourishing industries



in the prefecture of Wénchow, China. The method is not supposed to be a secret, but the native manufacturers do not encourage inspection by foreigners. The beans used in the industry are principally white beans from Chinkiang. Besides these little else is required than a large amount of salt and flour, and an unlimited supply of fresh water. There are five large manufacturers in Wénchow, who work under licences issued by the provincial Government and (as salt is a Government monopoly) are subject to periodical inspection of their premises by excisemen. The largest manufacturer at Wénchow takes out a licence for 8 salt "passes," each "pass" representing 368 bags of 85½ lbs., or 2,243 cwt. of salt every year. For each "pass" obtained the manufacturer is permitted to set up 36 vats, to each of which, again, are annexed two feeding-vats. The vats are arranged at the bottom of a reservoir; the salt is stored in a similar reservoir at the back of the premises, where it is allowed to stand and drain for one year, Chinese salt being mostly unclarified sea-salt. Each vat is provided with an impervious cover. The beans, having been carefully washed, are placed in a cauldron holding 133½ lbs. They are boiled for six hours, and then simmered and cooled through another eighteen hours. The broth is drawn off for use later on in the process, while the mash is mixed with flour (apparently wheat flour) at the rate of 213 lbs. of flour for each cauldron of mash. The resultant mixture is placed in large shallow baskets of bamboo, fitting each upon a wooden frame. These frames are piled one on the top of the other to a great height, and are left in the sun for five to eight days. When the mash emits a yellow exudation and turns yellow it is ready for further manipulation. It is now placed in the vats, and over it is poured a mixture of 2 parts of salt to 5 parts of water. To this clarified brine is added the bean-broth, and with this mixture the mash (now dry) is beaten up, and left to ferment. As it dries in the sun the process is repeated, and so on throughout the hot season (say, July to September), care being taken to cover the vats during rain. After three months or so a yellow oil appears, each vat producing about 667 lbs. of the oil. To this oil are added 2,400 lbs. of brine (but no bean-broth) thickened by 10 per cent. of salt, and the result is the soy of commerce. Of this there are six grades, the prices of which per catty (1½ lb.) are respectively 96 cash, 80 cash, 56 cash, 40 cash, 24 cash, and 20 cash—1,040 cash to the dollar (2s. 10d.). The soy of one year can be used in that year, but it is considered always better to give it a second summer's fermentation.

## Gazette.

### PARTNERSHIPS DISSOLVED.

- Barnes, H. T., and Reuter, A. E., drysalts, Long Acre, and Victoria Wharf, Viner Street, Cambridge Heath, N.E., under the style of Henry Barnes.
- Gabb, J., and Scott, W., physicians, surgeons, accoucheurs, and apothecaries, Bewellcy, under the style of Gabb & Scott.
- Groves, L., and Gandar, E., chemical agents, Mark Lane, E.C., under the style of Groves & Gandar.
- I'Anson, T. F., Ablett, E., and I'Anson, W., medical practitioners, Whitehaven, under the style of I'Anson & Ablett.
- Mercik, C., and Smith, W. F., emery and emery-cloth manufacturers, Nelson Emery and Knife-polish Works, Bateman's Row, Shoreditch, E.C., under the style of Nelson Emery Company.
- Pendleton, R. W., M.D., Foster, E. A., and Salmond, R. G., proprietors of a home for invalids, West Brighton.
- Sadler, H. G., and Preston, H. O., surgeons, apothecaries, and accoucheurs, Canterbury, under the style of Sadler & Preston.
- Vickers, J. F., and Vickers, S. F., isinglass manufacturers, Devonshire Square, E.C., under the style of James Vickers.

### THE BANKRUPTCY ACTS, 1883 AND 1890.

#### ADJUDICATIONS.

- Griffin, John (trading as John Griffin & Son), Mincing Lane E.C., colonial broker.
- Houldsworth, Daniel, and Houldsworth, John William (trading as D. Houldsworth & Son), Heckmondwike, Yorkshire, dry-soap manufacturers.
- Parks, Henry, late Etwell, Derbyshire, now Barton-on-Trent, chemist and druggist.

## New Companies.

**BRIDGE OF ALLAN MINERAL-WELLS COMPANY.**—Capital 5,000*l.*, in 1,000 shares of 5*l.* each. To take over the Airthrey mineral wells, Bridge of Allan, with the grounds belonging thereto.

**LEWIS'S (LIMITED).**—Capital, 10,000*l.*, in 1*l.* shares. Objects: To carry on the trades of chemists, druggists, dealers in patent medicines, mineral waters, proprietary articles, and all kinds of chemicals and drugs, and as pharmaceutical and analytical chemists. The first subscribers (who take one share each) are:—L. S. Cohen, Alexandra Drive, Liverpool; S. E. Levy, Market Street, Manchester, chemist; B. S. Cohen, Somerset Road, Birmingham, general merchant; D. L. Lewis, 14 Sandringham Street, Liverpool, general merchant; A. H. Dean, 3 Park Avenue, Longsight, Manchester, buyer; J. Myers, 23 Cropper Street, Liverpool, cashier. Messrs. L. S. Cohen, S. E. Levy, and B. S. Cohen are the first directors. Registered office, 40 Ranelegh Street, Liverpool.

**ELECTRO-MAGNETIC MEDICAL-PLASTER COMPANY (LIMITED).**—Capital, 10,000*l.*, in 1*l.* shares. Objects: To carry on business as manufacturers of and dealers in plasters employed with electricity as a curative agent, and of electrical, magnetic, galvanic, chemical and scientific apparatus. The first subscribers are:—J. Cunnah, 77 Yarbrough Street, Moss-side, coal merchant; G. C. Elliott, 13 Derby Road, Weaste, draper; W. J. Henderson, 2 Whitmore Place, Old Trafford, dentist; T. Scholfield, 177 Oxford Street, Manchester; J. Williams, 77 Alexandra Road, Moss Side, butcher (fifty shares each). H. Mills, 21 Middlewood Street, Harpurhey, manufacturing chemist; W. Wise, 101, Piccadilly, Manchester, medical electrician (one share each). The first directors (to be not less than five nor more than seven) are J. Cunnah, G. C. Elliott, W. J. Henderson, T. Scholfield, and J. Williams. Qualification, 50*l.* Remuneration, 1*l.* 1*s.* each for each board attendance.

**KOKO-MARICOPAS COMPANY (LIMITED).**—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of manufacturing chemists, perfumers, and dealers in "Koko" for the hair, &c., hitherto carried on at 9 Prince Teck Buildings, Earl's Court, and 233 Regent Street, W. The first subscribers are:—S. W. Herrick, 9 Prince Teck Buildings, Earl's Court, S.W., manufacturer; A. J. Dadson, 6 Furnival's Inn, W.C. (4,000 shares each); C. R. Langer, Hôtel Métropole, London, gentleman; J. M. Murphy, 61 Darent Road, Stamford Hill, N., printer; Emily Dadson, 1 Dorset Road, Merton Park, spinster; Ada Schreiber, 5 Wyfold Road, Fulham; D. J. Bridgroom, 33 Tredegar Square, Bow, gentleman; A. J. Blunt, 26 Outram Street, Islington, clerk (one share each). The managing directors are S. W. Herrick and A. J. Dadson. Remuneration, 500*l.* per annum each. Registered office, 9 Prince Teck Buildings, Earl's Court, Middlesex.

**LANCASHIRE MALT-VINEGAR COMPANY (LIMITED).**—Capital 10,000*l.*, in 5*l.* shares. Objects: To purchase or otherwise acquire the goodwill, property, assets, and liabilities of the business now carried on under the style of "The Lancashire Vinegar Company," at the Britannia Brewery, Lion Street, Radcliffe, Lancashire; and to carry on the business of the manufacture and sale of vinegar, sauces, pickles, embrocations, liniments, and any commodity of which vinegar is in any shape a constituent part. The first subscribers are:—D. Astley, 50 Dean Street, Radcliffe, confectioner, 230 shares; H. E. Shaw, Boar's Head, Radcliffe, farmer, 115 shares; J. Lomax, 19 Victoria Street, Radcliffe, engineer, 56 shares; T. K. Holden, Bury, traveller, 39 shares; J. Ellsey, 14 Cross Street, Radcliffe, grocer, 40 shares; W. Ellsey, 14 Cross Street, Radcliffe, traveller, 20 shares; J. T. Smith, 31 Leed Street, Radcliffe, chemist, &c., 20 shares. The first directors are D. Astley, T. K. Holden, H. E. Shaw, J. Ellsey, J. T. Smith, J. Entwistle, and J. Lomax. Qualification, 100*l.* Remuneration to be determined by the subscribers. Registered office, 99 Sion Street, Radcliffe, Lancashire.

## Pharmaceutical Society of Great Britain

### COUNCIL MEETING.

WHEN public business began on Wednesday morning last in the Council-room, 16 Bloomsbury Square, there were many vacant places at the table. The President was there, of course, but the vice-chair was filled by the Treasurer (Mr. R. Hampson). The absence of Mr. Cross, as the President explained later, was due to the sudden death of his brother. The other members of the Council present were Messrs. Abraham, Atkins, Bottle, Greenish, Marshall Leigh, Martindale, Newsholme, Southall, Storrar, and Young; Messrs. Hills, Johnston, Richardson, and Schacht arrived somewhat later.

The minutes were read and confirmed, the PRESIDENT apologised for some of the absentees—Mr. Harrison had been attacked by influenza, but was happily recovering; Mr. Allen and others were suffering from domestic illnesses and bereavement—and, then began

### THE COMMON ROUND

of routine business. Two Blackburn chemists were elected members of the Society, having been in business on their own account prior to August, 1868, while the classes of Associates, Associates in Business, and Students were augmented by two, eight, and some dozen names respectively. Nine applicants were restored to their former status in the Society, having paid the nominal fines, and the names of three—one of whom was living in Sydney—were restored to the register of chemists and druggists, the necessary declaration and fine of one guinea having been provided in each case.

With reference to the number of names which had recently been added to the roll of the Society from Blackburn, the PRESIDENT observed that that result was due to the activity and zeal of the local secretary there.

Information had been received from Edinburgh that Mr. Laidlaw Ewing was re-elected Chairman, and Mr. Kerr Vice-Chairman, of the North British Branch for the ensuing year.

### REPORTS OF COMMITTEES.

#### Finance.

There was nothing very remarkable in the particulars of receipts and expenditure during June. The balances in hand at the end of the month were reported as follows:—On the General Fund account, 5,537*l.* 11*s.* 1*d.*; on the Benevolent Fund account, 970*l.* 12*s.* 6*d.*; on the Donation account, 31*l.* 17*s.* 5*d.*; and on the Orphan Fund, 15*l.* 13*s.* 9*d.* The estimated current expenses for July were 2,061*l.* 15*s.* 6*d.* The committee recommended that 2,000*l.* should be placed on deposit at the banker's "for such time as the Treasurer may direct."

The General Fund had begun June with a balance of 4,183*l.* 1*s.* 10*d.*; receipts had brought this up to 6,545*l.* 14*s.* 11*d.*, from which 1,008*l.* 3*s.* 10*d.* (the current expenses of the month) was drawn, leaving the augmented balance indicated above.

Affairs monetary were not quite so flourishing on the Benevolent Fund, since the balance at the beginning of June was 980*l.* 3*s.* Receipts during the month amounted to 33*l.* 9*s.* 6*d.*, and 43*l.* were paid away, leaving a balance 9*l.* 10*s.* 6*d.* less than the Fund opened the month with.

The Donation account had remained *in statu quo ante*, but the Orphan Fund had been depleted of 30*l.* on behalf of the child named Minetti, referred to last month.

The most noteworthy items in the estimated expenses for the present month were 539*l.* 9*s.* on account of the *Journal*, and 84*l.* 4*s.* 5*d.* for rates. The rest was made up of salaries and "sundries."

The PRESIDENT did not offer much comment on these details. He pointed out that examination-fees made up the main part of the receipts on the General Fund account, while subscriptions and ground-rents totalled the thirty odd pounds on the Benevolent Fund account. The 2,000*l.* referred to as transferred to the deposit account at the bankers was not likely to be wanted for some time, and this

means was taken of getting what little interest it would yield during the interval.

The Treasurer was formally instructed to pay the annuitants the amount of one quarter's annuity.

### THE BENEVOLENT FUND.

Mr. HAMPSON, *vice* Mr. Cross, announced that eight applications for relief had been considered, four of which were not assisted. A total amount of 40*l.* had been voted in casual grants. With reference to the child Minetti, for whose admission to the London Orphan Asylum votes had been solicited at the previous meeting, he had the satisfaction of announcing that the result of the election had been very satisfactory, the child polling 1,632 votes. The mother was anxious to get another child into the Infant Orphan Asylum at Wanstead, and the votes or influence of members of the trade were solicited on its behalf. The Treasurer wished to urge the claims of the case upon all able to help. The stationary condition of the Donation account was not allowed to pass unnoticed, and Mr. Hampson wished, further, that the attention of the members and of the trade generally should be called to the Orphan Fund. He added that they ought to have a sum of 100*l.* to 150*l.* in hand to meet all emergencies—an estimate which drew signs of approval from the President.

The 40*l.* worth of grants, made up of two 15*l.* and one 10*l.*, was formally sanctioned by the Council.

### THE LIBRARY, MUSEUM, SCHOOL, AND HOUSE.

As the PRESIDENT said in his comments upon this report, it naturally fell into three divisions. First came the purely routine details supplied by the Librarian and Curator concerning attendance of students and others in their respective departments. Among the donations acknowledged was a collection of essential oils from Messrs. Schimmel, Leipzig. The staff of the Society's school had reported on their classes. The North British Branch had suggested the appointment of additional local secretaries in Scotland, and of assistant local secretaries in Edinburgh, Dundee, and Glasgow, and their proposals, with some minor modifications, were adopted.

Another matter which had engaged the attention of the committee was the subject of the teaching of materia medica in the Society's school, with the result that it recommended the establishment of a

### PROFESSORSHIP OF MATERIA MEDICA.

to which the subject of pharmacy might be added later. The stipend to be 100*l.* a year and students' fees. As the right man to fill the new post, the committee named Mr. H. G. Greenish, who for three years had conducted the practical demonstrations in materia medica. In somewhat tardy recognition of the labours of Mr. J. Ince in the teaching of pharmacy, it was further proposed to institute the official title of "Lecturer in Pharmacy," in order to define his position on the staff.

Finally the selection of delegates for the pharmaceutical gatherings in Chicago this year had formed one of the duties of the committee. They recommended that the President, with Messrs. Martin and Martindale, should be appointed to attend the seventh International Pharmaceutical Congress and the meeting of the American Pharmaceutical Association in August next.

The PRESIDENT found much more material for comment here than the bare details of the Finance or the Benevolent Fund Committees had afforded. With reference to the collection of essential oils, he spoke of Messrs. Schimmel as typical manufacturers of such products. Without making special allusion to the monetary value of such a collection, he wished to express his sense of the generosity and public spirit evidenced by the firm in this elegant and courteous manner. The specimens were such as would serve for comparison as standards of quality, and had been accompanied by a hundred copies of a descriptive catalogue.

Mr. ATKINS inquired how many specimens there were, and the PRESIDENT, not knowing exactly, thought there might be 150.

The report from the Executive of the North British Branch had its origin in the conviction arrived at by the friends north of the Tweed that something could be done to awaken more interest in the Society among Scottish mem-



bers of the trade. Mr. Carteighe folded his arms and, fixing his gaze upon the portrait of a previous President that adorned the opposite wall, began to make a curiously-toned (it might almost be said "overtone") speech about the advantages offered to the members of the craft in Scotland by the North British Branch of the Pharmaceutical Society and its "palatial building in York Place." One or two members looked up at this point and scanned the President's features for a smile, but with undisturbed gravity, and still holding the portrait with his glittering eye, he went on to say that the geographical features of Scotland rendered it difficult for local secretaries to get very far from their particular centres. The scheme proposed by the Executive had been constructed with a view to the facilitation of communication with all parts of the country, and if it succeeded only half as well as its framers hoped, the Council would be glad to congratulate them, and they must themselves be proud of the result of their efforts. Commenting upon the changes proposed in the teaching of materia medica, the President spoke of Mr. H. G. Greenish as the only living English pharmacist who had had that high-class training in materia medica in its widest sense, which was afforded by the University of Dorpat. Some three years before he (the speaker) had been instructed to ask Mr. Greenish if he would undertake the demonstrations in materia medica for a year or two, in order to see whether the work would be suited to the school's requirements. Mr. Greenish had carried on the demonstrations to the entire satisfaction of the department with which he was associated. He was extremely popular with the students, not in pandering to their grievances, said Mr. Carteighe, but in sparing no pains to help them forward with their studies. Well, this department of the school had gone on developing; they had at the present practically a biological laboratory. In his opinion, they were bound to take up the study of materia medica, since it was being largely withdrawn from the medical curriculum. He did not use the term "materia medica" in the sense attached to it by medical men; all the pharmacist meant by the study of materia medica was the study of the composition, histologically and chemically, of drugs—the getting to know all about their origin, nature, and structure. Well, after Mr. Greenish had been good enough to undertake that work for over two years, his liking for it had intensified so that he wished to forsake pharmacy as a business, and devote himself to this histological study entirely, even at the cost of a loss of a certain part of his income. Under these circumstances the committee had ventured to propose that Mr. Greenish should be offered the post of Professor of Materia Medica. Mr. Ince had, as the Council knew, fulfilled the duties of teacher in practical pharmacy for some years, and his work was considerably greater in regard to teaching than that which devolved at present upon the materia medica part of the school. The reasons for this were partly that more of pharmacy was required in the examinations, and that a longer period was required for acquiring knowledge of some branches of pharmacy than of materia medica. Mr. Ince's emolument from the fees was therefore proportionately larger than that which would attach to the materia medica class. As, however, he had not received any title it was proposed to appoint him "Lecturer in Pharmacy." Subsequently, the Professor of Materia Medica would take charge of pharmacy either himself or by a demonstrator or assistant. The work which Mr. Greenish would undertake to do for them was of considerable importance and was appreciated by the students. As a matter of fact, it was becoming so popular that the chief difficulty was to find time enough for the students to indulge their bent for materia medica. There had been a noticeable tendency of late for students to take a wider view of their studies than was necessary for the examination merely. In all other countries the schools of pharmacy were subsidised or supported by the State, or were attached to the national universities. In England they were not in that happy condition, but, following British traditions, had put their hands in their pockets and raised a structure for themselves, where he would venture to say they carried on the work as well as it could be done. (Hear, hear.)

Mr. STORRAR added a few words about the Scotch scheme. He believed that the trade in Scotland had never been more loyal to the Society than at the present time, but that loyalty was not translating itself into a growth in the membership. After some consideration of this state of things it was

decided that the best means of remedying the defect would be by personal dealing with the members of the trade on the part of local secretaries.

Mr. SCHACHT said he completely approved of the matters recommended in the report. It was a matter of very great personal gratification to know that they had a gentleman so capable of fulfilling the duties of a professor of that important branch of their work and knowledge, materia medica. He wished particularly to refer to the subject because the gentleman mentioned brought not only great ability to his work, but appeared to enter upon it in the exact spirit they would wish to have in all members of their staff. He believed Mr. Greenish's appointment would strengthen the staff in its teaching powers and elevate or encourage the elevation of its tone and spirit. It was a matter of regret to him that they could not meet the proper claims of their professors with regard to emolument in the way they would like; a proportion of their reward must come from the consciousness that they were engaged upon a good work. It was fair and right that Mr. Ince should be officially recognised.

THE PRESIDENT added that, though the gentleman appointed bore the name of Greenish, he had been selected for the sake of his own personal qualification. It was not the less satisfactory for them to know that he was the son of his father. (Applause.)

The report and recommendations of the committee were then received and adopted.

Professors Attfield, Dunstan, and Green were formally re-appointed to the Chairs of Practical Chemistry, Chemistry, and Botany respectively for the ensuing year; Mr. J. Ince was reappointed Lecturer in Pharmacy, and Mr. E. F. Harrison Assistant Lecturer in Chemistry.

#### THE CONFERENCE IN NOTTINGHAM

During the selection of delegates the flag was put up to enable the President to enliven the councillors with some amusing personal reminiscences of the previous meeting in Nottingham. Finally, the following were appointed to represent the Council: The Vice-President, Messrs. Abraham, Atkins, Grose, Johnston, Marshall Leigh, Newsholme, Richardson, Southall, Schacht, and Storrar. The Secretary, Editor, and Sub-editor were also requested to attend.

#### CORRESPONDENCE.

The Chester Chemists' Association tendered its sincere thanks in a letter signed by all the chemists of Chester for a cabinet of materia medica specimens presented by the Society.

The British Institute of Public Health had sent a printed circular bearing the names of Professor W. R. Smith (Chairman of Council), Sir Charles Cameron, and other well-known men of science, inviting members of the "corporation" to attend a congress of the Institute in Edinburgh from Thursday, July 27, to Tuesday, August 1. The circular stated that the Lord Mayors of London and Dublin were to attend in state, and detailed the various topics—preventive medicine, housing of the working classes, the disposal of refuse, registration of plumbers, the construction of fever-hospitals, &c.—which would form subjects of consideration at the Congress. Messrs. Storrar, Ewing, and Kerr were appointed delegates to attend the Congress.

Letters had been received from Professor Warden, Calcutta, Mr. C. A. Barber, St. John's, Antigua, and M. A. Ferrein, Moscow, expressing their appreciation of the honour done them in the election to the post of corresponding members of the Society.

#### GENERAL PURPOSES.

The only item of the work of this committee made public was that, after careful consideration, the Council had resolved to appeal in the case of the Pharmaceutical Society *v. Delves*, Manchester.

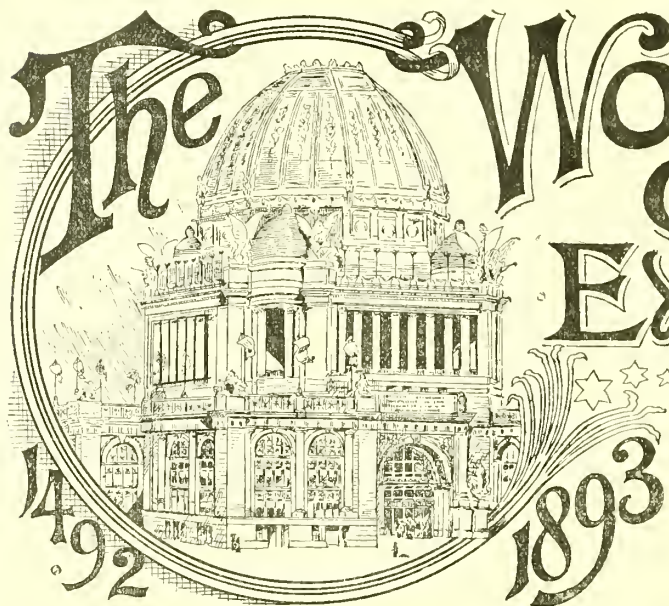
This concluded the public proceedings.

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#### WANTED, A FILTER.

Little drops of water  
Filled with fever germ  
Make the doctors happy  
And the patients squirm.

# The WORLD'S COLUMBIAN EXPOSITION CHICAGO.



BRITISH subjects visiting the World's Fair have at last awakened to the anomalous position amongst the National buildings which Victoria House holds, and to which reference was made in the first report by our representative there. The trouble began in the *Chicago Tribune* last week. An indignant Britisher who had been refused admission to the House complained to the British Consul about the matter, and, getting no satisfaction from him, sent the correspondence to the *Tribune*, where it was published. Other papers took the matter up, and Sir H. Trueman Wood was roundly abused for exclusiveness. The immediate effect was that the Chief Commissioner sent tickets to all British exhibitors for distribution amongst their friends, these tickets being necessary before Victoria House can be viewed internally. Sir Henry's part was taken by some of the papers, and on June 15 the *Dispatch* gave the following, apparently official, version of the facts:—

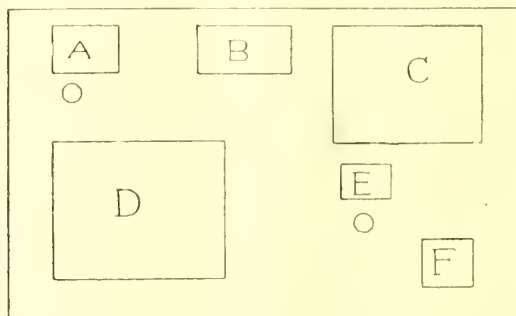
All the furniture in Victoria House, including even the carpets, are the exhibits of an English furniture-house that has now made an assignment. The British Commission paid 25 per cent. of the value of this furniture as a guarantee of its being cared for. As Sir Henry avers, if he was to let the crows wander through Victoria House, there would not be left a piece of furniture or carpet worth looking at in fifty days. Moreover, Sir Henry is now responsible for this \$10,000 worth of furniture and effects to the assignees of the defunct furniture-house, and as every single dollar the British Commission had allowed them by the Home Government is bespoken for, if not expended, it would simply mean that Sir Henry Wood would be responsible in the sum of \$10,000 merely to gratify the murmurings of a few misinformed people. Let the disgruntled Britishers and British Americans of Chicago combine and subscribe \$10,000, and then it will be all right.

It is quite true that the Victoria House is of such a character that a thousand or two visitors every day would make it shabby in a week; but that is scarcely the question. All the buildings, with the exception of the British one, have been made so that everybody, and especially natives of the countries represented, can make use of them. Each State in the Union has its house with ladies' parlours, smoking-rooms, libraries, and writing-rooms, lounges, chairs, every little thing which would help to make visitors from the respective States feel that they have a place of their own that they could enter freely and use liberally. But the Commissioners of the United Kingdom have at an enormous expense—30,000*l.*, it is said—erected a moderate-sized building for their own exclusive use, and as a spectacle for the favoured few; while British subjects who come here have the pleasure of looking on England's greatness from the outside, and on a hired 10-cent chair.

Proceeding with our notes on the British exhibits we again enter the Manufactures Building and examine first the very prominent and attractive exhibit which

BURROUGHS, WELLCOME & CO.

have set up in this department. This firm have one of their English employes and a young graduate of the Philadelphia College of Pharmacy in charge of their pharmaceutical exhibit, which occupies a space 32 feet by 20 feet. This is placed on a specially-constructed floor of polished pine, slightly raised from the ground and railed round. The exhibit is arranged thus:—



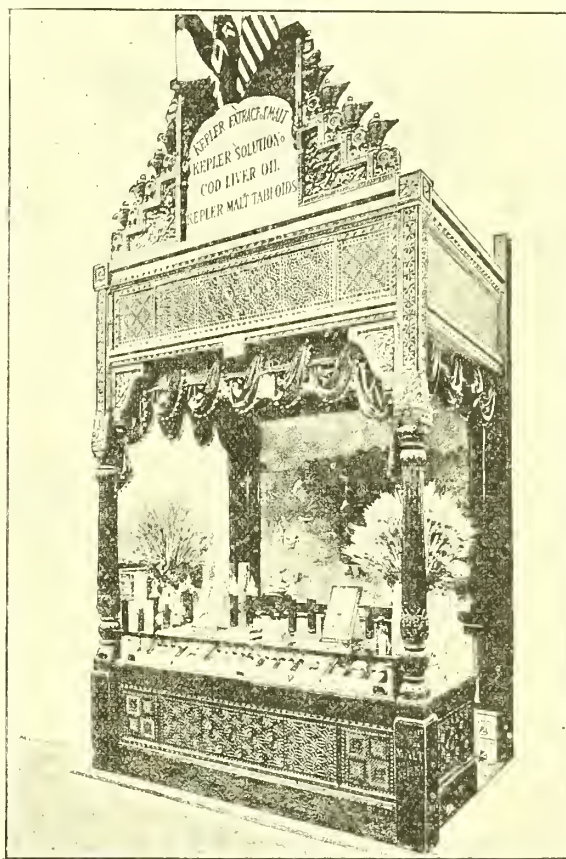
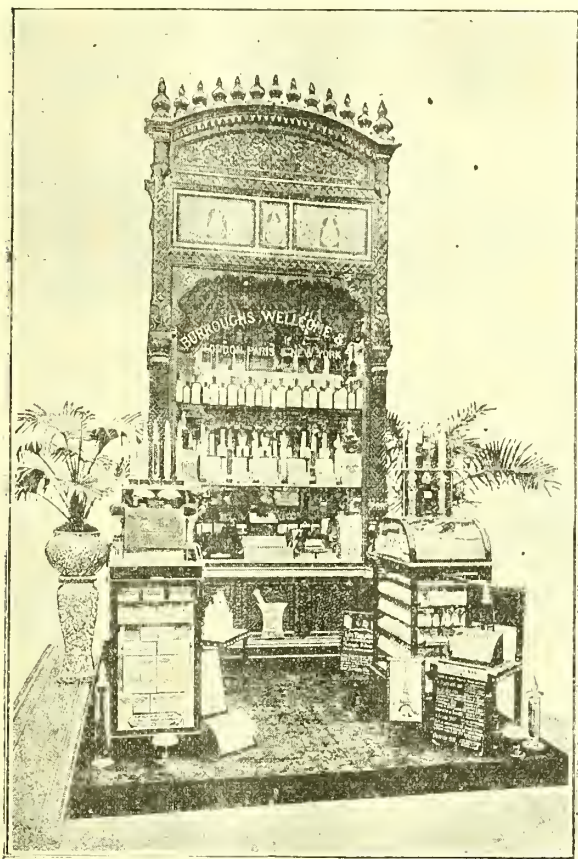
A, E, and F are doctors' prescription-desks of different patterns; B is a glazed case, containing one of the Congo chests used by Stanley; and C and D are large showcases, constructed of the carved wood obtained from the Indian and Colonial Exhibition. In this section Burroughs, Wellcome & Co. show all their manufactures, except malt preparations, which are placed in the Agricultural Building, and photographic tabloids, which are found in the Liberal Arts Gallery. Their goods are so well known to THE CHEMIST AND DRUGGIST subscribers that any attempt to refer to them in detail would degenerate into a mere catalogue. It is a matter of interest to note, however, the thoroughness with which many Americans "do" exhibitions. Quite a large proportion of those who spend their time in the various courts go about with note-book in hand, and whenever anything strikes them as being out of the common down go a few notes on the subject. Nothing excites their attention more than such things as the Stanley case, which they will examine minutely, and then turn to the elegant work of the Hindoo carvers, and put questions to the attendants regarding it. This suggests to us the advisability of having small slips, with figures and brief descriptions of interesting objects, for distribution to the curious. As has been said, Burroughs, Wellcome & Co. have an exhibit of photographic tabloids in the Liberal Arts Gallery; and the other day the Duke of Newcastle, who is



on a photographing tour round the world, made a practical inspection of this exhibit, and left a good order for the tabloids. By the way, anything in the shape of a duke is an idol to the Exposition authorities, and it goes without saying that the official photographer extended the right hand of fellowship to Newcastle's lord in the shape of a free pass. Without a pass, Mr. Villiers, of the *Graphic*, attempted snapshots, and was quickly conveyed in a patrol-waggon to the police-station, there to give an account of himself. The "Kepler" malt exhibit, in the Agricultural Building, occupies a third Indian case, and between it and an open stand of essence of malt (already imitated in the States) and "Kepler" combinations are a sensible table and two chairs, whereon the weary are not disinclined to rest themselves.

BRUNNER, MOND & CO. (LIMITED), of NORTHWICH, exhibit about a dozen articles by the ammonia-soda process, and as a setting to these they have erected what we believe is a reproduction of an old Cheshire house. Any-

that they are conspicuous. The United Alkali Company's exhibit is in a handsome mahogany case constructed from designs by Mr. Huon A. Mactear, F.R.I.B.A. It is supported on lions' claws and legs, the front and top being richly inlaid. The lower portion consists of cupboards, having plate-glass mirrors behind. The upper part stands upon richly carved and fluted columns, with Corinthian capitals. Above these is a deep frieze, with a beautifully inlaid inscription in satin-wood on a deep rosewood ground, and twining in and out is a handsome floriated design in marquetry work, in about six different coloured woods. This frieze is surmounted by a richly carved and moulded cornice. The "coat-of-arms" of the company is worked in the pediment, with mermaids on either side, flanked by scrolls and terminated by gilt cupids. The shelves are covered with black velvet, and faced with bevelled-edge mirrors. In this elegant structure are shown samples of all the products manufactured by the company, such as Leblanc and ammonia alkali, mineral acids, manganese and chrome compounds, fertilisers, caustic potash, &c. Some



BRUNNERS, WELLCOME & CO.'S EXHIBITS IN INDIAN CARVED WOOD CASES.

thing of this nature fascinates the Americans; they want to know all about it—about the black oak furniture inside, and so on—but there is nobody at the Exhibition to tell them, nor had anybody taken the trouble up to June 7 to place the massive pear-shaped jars of chemicals in position. These jars contain "pure alkali, soda crystals (sal soda), sesquicarbonate of soda (concentrated sal soda) and bicarbonate of soda, sulphate and muriate of ammonia, and bleaching-powder." The effectiveness of the exhibit has hitherto been discounted by want of attention. The workmen who erected the house got \$400 for the job, and when it was done they threatened to knock the whole thing down again if they did not get another \$100 to put the interior right.

THE UNITED ALKALI COMPANY (LIMITED) and one of the incorporated firms (the GREENBANK ALKALI COMPANY) have two stands, upon each of which effective exhibits are placed. These are on the border of the aisle, so

of the articles marked "Pure" strike us as peculiar. For instance, the caustic potash has a grey colour, and the pure acids are not devoid of colour. The Greenbank Company's exhibit of bleaching powder in tins and concentrated soda was arranged on June 7.

#### THOMAS BIGGS'S SHOW

of sheep-dip compositions looks very naked. It is simply a pile of the tins, with here and there a foot-rot speciality and models of sheep-dipping apparatus. The exhibit is scarcely sufficiently attractive to lead to business.

ALFRED BISHOP & SONS (LIMITED), OF MILE END  
NEW TOWN, E.,

have placed a handsome ebony case (glazed with bevelled plate glass) in the section, and it is one of those which need the attention of the dust-brush badly. There is every reason why an exhibit of granular preparations should have



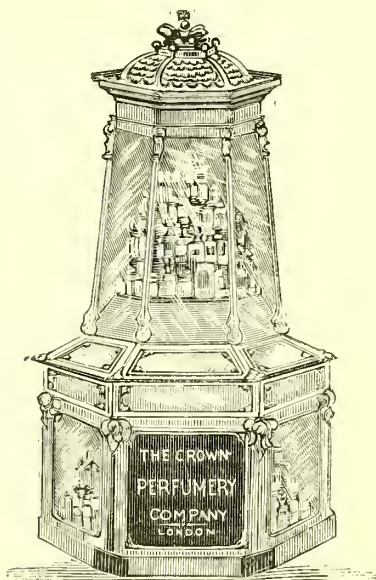
exceptional prominence in the World's Fair. These goods have long been popular in the United States, and, as far as we have observed, the method of preparing them in good condition and without impairing the activity of the medicinal ingredients has not been hit off exactly by American manufacturers, with one or two exceptions. Messrs. Bishop's display (without the dust) is a splendid standard. In about thirty large show-bottles with recess labels they have placed



typical preparations, such a lithia, Vichy, and similar salts, chalybeate compounds, bismuth and pepsin and other digestive stimulants and sedatives, preparations of the antipyrin class (notable for their freedom from colour—a highly-important characteristic), besides the original granular effervescent citrate of magnesia. The equality of the granules and general appearance should go far to secure for the exhibitors recognition by the Court of Awards.

#### THE CROWN PERFUMERY COMPANY, OF LONDON,

have, we believe, a considerable American business, and in sympathy with it they have placed in the British section a highly attractive series of their finest products, which are displayed in a quadrangle of flat cases with an upright case in the centre. Bannerettes of blue satin with gold lettering

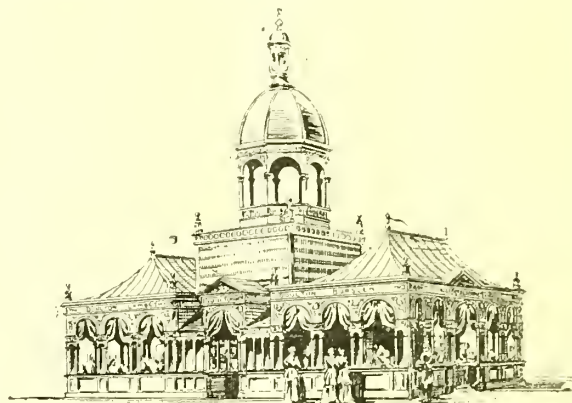


and giant bottles of lavender salts relieve the exhibit from any tendency to plainness; but here, too, we found the cases so inefficiently dusted that ladies were discouraged from inspecting the contents. These are very fine, and show considerable æsthetic taste in arrangement. For instance, in one case is *Lilas blanc*, a dainty cream colour being the tone

of labels and boxes; *Violettes de Parme* in another is a mass of natural violet colour; *Cuir de Russe* in a third is set in harmonious brown, and for crab-apple blossom and "Matsukita," floral designs on a cream ground are adopted, with a variation in the case of crab-apple blossom to a matt-surface blue. Apart from the handkerchief-perfumes, these odours are also represented in cachets and face-powders. The central case is filled with leading perfumes, lavender salts, and toilet-soaps.

#### DOULTON & CO., OF LAMBETH,

are represented in the Chemical section by a large assortment of their chemical stoneware, which we had the opportunity of referring to some months ago. As far as we have seen, there is no other collection of the same kind in the



whole Exhibition. Mr. Wilton P. Rix, one of Messrs. Doulton's staff, is the contributor to the British Handbook of an article on pottery, in the course of which he says:

The advances of science in chemistry, electricity, and metallurgy, as well as in sanitation, have laid pottery under tribute for the production of apparatus suitable to the various requirements, and the adaptation of material to these purposes has lately received the unremitting attention of some manufacturers. The composition of clays in some districts of the British Isles appears to be peculiarly suited to these purposes, and the important examples of large stoneware vessels, acid taps, pumps, and crucibles (all of unusual dimensions) show that this particularly useful section of British pottery has well maintained its position. If cork, caoutchouc, and glass have greatly assisted scientific discoverers in their research, it may be said with equal truth that stoneware, fireclay, and plumbago have afforded to the scientific producer the possibility of equally important results, and on this account the progress of this branch of pottery must have an increasing interest.

The peculiar advantages which we thus possess in England enhance the importance of such attention to this branch of industry as Mr. Rix hints at, especially in view of the fact that German manufacturers give powerful evidence in the World's Fair of their ability to compete in everything that requires skill and perseverance.

#### J. GOSNELL & Co.'s CASE

is one made of solid brass, and in it they display "Cherry-blossom" specialties. It is a regularly-attended exhibit.

#### THE GALLERY OF LIBERAL ARTS,

is where education, literature, engineering, public works, music, and the drama are looked after. The exhibits are not numerous, and a very large part of the British space is taken up with photographs by several of the leading British photographers—Van der Weyde's collection of pictures which show how he corrects the unnatural size of head and hands, as figured by the best cameras, being, perhaps, the best. This novelty creates considerable interest.

In the group devoted to instruments and apparatus of medicine, surgery, and prosthesis, English industry is represented by three exhibits—a fourth, catalogued as by Mr. Journef, we could not discover. Two of the exhibits are dental and one is a vaginal syringe. The great English makers of surgical instruments have not thought it worth their while to be represented. The duty on steel instruments



is 45 per cent., and the freight, say, 10 per cent. of the original cost—so that competition with American makers is, at present, practically impossible. This probably explains their absence. Practically the same circumstance applies to other goods of a pharmaceutical or scientific character, and as business men have to work for their own living, and not for that of their posterity, we cannot be surprised that British exhibits cannot be called representative of our chemical industry. It must be admitted, however that the French and German manufacturers have done better. They expect to secure their reward when a reduction of the tariff comes to pass, and they also entertain the hope of winning colonial and foreign business, especially South American. It is not easy to decide off-hand which view is the wiser one.

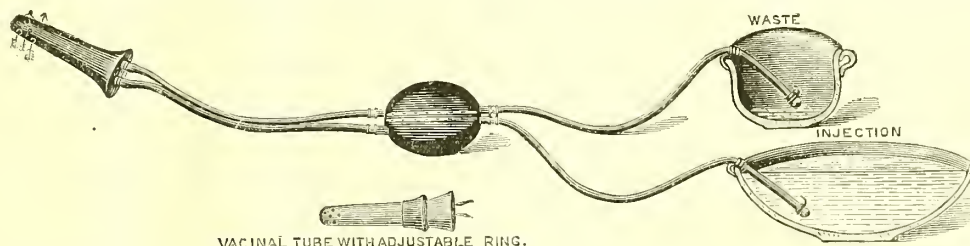
**CLAUDIUS ASH & SONS (LIMITED), OF BROAD STREET, W.,** have for seven years past been directly represented in New York by a branch, and from this fine assortment of dental instruments and specialties of all kinds has been placed in the gallery. The firm feels, of course, the heavy incidence of the tariff, yet some American dentists prefer English forceps, scalars, &c., although they are a little higher in price, and English teeth rule the market because they can be cut and repolished. This is a characteristic which American teeth do not possess. It is a consequence of the nature of the clay from which English teeth are made.

**THE ENGLISH DENTAL SPECIALITY COMPANY (LIMITED), OF NEW BARNET,**

make a display of dental goods, including chairs, and the exhibit requires a very large space. The company is, virtually, an association of various makers, each specialising a particular department, and the combined exhibit includes all their manufactures.

**ARTHUR B. CRICKSHANK**

is the inventor of a uterine syringe called the "Vonda," and he is sufficiently confident in its merits to exhibit only



VACINAL TUBE WITH ADJUSTABLE RING.

two specimens of it. The syringe is made by Ingram & Son, of Hackney Wick, in black indiarubber. The peculiarity of it is that it has two tubes at each end, one an inlet the other an outlet, for the injection. Two tubes meet together in the vaginal pipe, as shown in the illustration, and at the other side the end of one pipe goes into the injection, and the other into a vessel to receive the outflow. By means of valves the inventor has ensured that the injection always passes up through one of the upper tubes, which cannot serve as the means of outflow, so that the fluid, as it flows from the uterine cavity, drains off by the second set of tubes.

The next section (CLI.) is comprehensive, for it includes "instruments of precision, research, and photography, and photographs." Omitting the photographs, which have already been referred to, the exhibits may all be classed under what are known as

#### OPTICAL GOODS.

Of course, the British Commissioners have followed the plan of classification recommended by the Exhibition authorities, and it is not their fault that the class-heads are often more comprehensive than the exhibits which follow them. Still, the ridiculous has been very nearly approached by getting Professor Silvanus P. Thompson, F.R.S., to write an introductory chapter on "Instruments of Precision (other than Electrical and Magnetic)." It is difficult to discover the use of telling catalogue-owners all about seismometers when

there is not a single example of that quake-recorder in the British section, or even of the balance. We have to go downstairs to the American exhibits to get the necessary illustration to the learned Professor's remarks. The article becomes an unintentional exposure of the weakness of the British exhibit in this respect, for the writer has drawn most of his examples of progress from foreign sources (although S. P. Thompson is mentioned four times), and, in regard to the testing of thermometers, figures are actually drawn from Berlin instead of Kew, which could have furnished more pertinent statistics. Continental manufacturers have done extremely well in this section. As will afterwards be shown, the Exhibition contains a collection of foreign scientific instruments, in many respects unique. But limiting ourselves for the present to British makers, it may be said that the exhibits of optical goods chiefly comprise articles in frequent demand, and the firms who participate are those regarded by the trade and by professional men as specially energetic. Of this they give fair evidence. As far as we have been able to gather, the exhibitors are satisfied with the attention given to them by visitors, and some have received the assurance that there is a good field for business in the United States.

**R. & J. BECK, OF CORNHILL, E.C.**

This firm have placed six cases on their stand, and in these they show a fine collection of microscopes, including two fitted with exceptionally fine movements to the stage and substage. The microscopes are also fitted with a bewildering array of accessories, and are adapted for the highest purposes of research. It is curious to contrast with them all that remains of a Beck microscope which passed through the great fire of Chicago—viz., the base *minus* two of the feet. Photographic cameras are shown, the "Frena" hand-camera amongst them, with examples of the work done by it, and enlargements to show its capabilities.

**F. DARTON & Co., OF ST. JOHN STREET, E.C.,**

have two positions, and at present they have one well-filled case on exhibition. Mr. Darton himself attending it. This

case is shown in the appended illustration. In the second stand, which is immediately to the rear of the case, it is Mr. Darton's intention to place a horseshoe table with a series of microscopes and objects for view by visitors, but the tardiness with which the railway people deliver goods has so far defeated his object. Meanwhile the contents of the cases are in themselves of great interest. Perhaps the aneroid barometers deserve first mention, for of these there is as large and varied a collection as we have seen in the whole Exhibition. These are all made by the firm, and have either white glass or silver dials, upon which the figures appear very distinctly, special attention having been given to this for the sake of those whose eyesight is not good. Instruments of this class, which are used for precise purposes—especially altitude aneroids—are freely displayed, and there is a new pocket aneroid with the magnifying-lens cemented to the movable face. This instrument is sensitive to 10 feet of altitude, and is no larger than a gentleman's watch. These instruments are quite novel in the United States, we understand, and they have attracted considerable attention. In connection with barometers, Mr. Darton has amusing accounts to give of the behaviour of self-recording aneroids in the variable temperature of the Manufactures Building. Most of these aneroids are set to a high temperature for our own climate—about 90° F.—and whenever the temperature goes much beyond that jump goes the registering lever away from the recording drum. One day the temperature of the hall was 58° F.; next day, at 3 P.M., the



thermometer stood at  $110^{\circ}$ . This is very trying for such thermometers as the "Hygienic"—an instrument with a flat spirit-column about  $\frac{1}{8}$  inch broad. These do not register above  $80^{\circ}$  F., yet they are uninjured by the high temperature, as the apex is widened out into an olive-shaped reservoir capable of holding all the liquid which may expand to double the temperature which the thermometer records. This precaution is adopted in most of the Darton thermometers. Another good instrument is a new Six's thermometer, with a patent spring at the top for preventing the indicator from being fixed in transit. The spring is simply



a hair sealed into the glass, and its presence has enabled a stock of the thermometers to be carried to the States without injury. It may seem a pretty tough task to seal a hair into glass, but there is something better than that in the exhibit—viz., a minimum glass thermometer with spirit-column protected or corrected for earth-radiation by an outer tube. At the base of the column the two tubes are sealed together into one, and this is done after the spirit is in! Some who know what glass-blowing is can scarcely believe this. Apart from these examples, the exhibit contains a selection of microscopes, several cases of mounted objects, and many optical and "precision" instruments.

#### RILEY BROTHERS, OF BRADFORD,

have several of their single and double optical lanterns well displayed, along with slides and accessories, but our representative had no means of inspecting these closely.

#### ROSS & Co., OF NEW BOND STREET, W.,

through their agents, the Geneva Optical Company, Chicago, make an exhibit of cameras, telescopes, field-glasses, microscopes, lenses, &c. It is for lenses that this firm is famous, and it was curious to hear one of the official photographic staff say, "I have used a Ross lens for twenty years. I was a poor man when I got it, and had to scrape until I got the dollars together," which observation recalls the fact that a letter from Mr. Arnold, the official photographer, is shown in the exhibit as a trophy. It declares that only Ross lenses are used by Mr. Arnold's department. Ross & Co. are now using Jena glass for some of their best combinations. This glass is made by Schott & Genosse, of Jena, who for the past ten years have been engaged in the study of the production of glass for optical and scientific purposes, with the result that they have produced a number of kinds adapted for different purposes, and of these Messrs. Ross have selected one in which dispersion and refraction are neutralised sufficiently to ensure sharpness of the image; in short, the glass in itself presents the properties of the usual compound flint and crown glass lenses. A good example of the new departure is shown in the concentric lens for architectural and copying work or even landscapes. The special merit of this lens is that

it gives images absolutely free from distortion, being capable of reproducing parallel lines so that no divergence from the normal is apparent to the human eye, and the marginal definition is as good as the central. This property is ensured by (1) the quality of the glass and (2) the peculiar combination of plano-convex and plano-concave, as

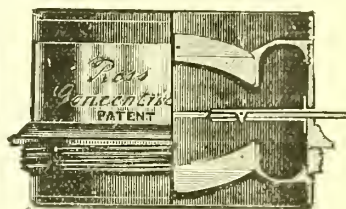


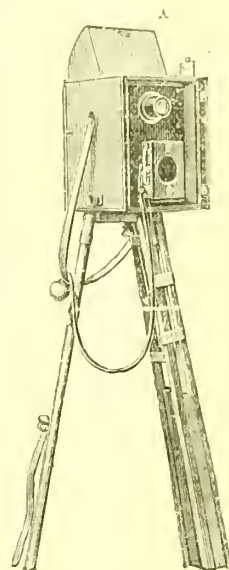
FIG. 1.



FIG. 2.

shown in fig. 1, where it will be seen that the former fraction grades off to minute sharpness. The lens is slow-working, but is only used for subjects in which that is not a material objection, and it is so sharp that it can be used without diaphragms. Another lens, which promises to be of great utility, is the "Universal Symmetrical," for instantaneous work (fig. 2), constructed also from Jena glass of a special make, which has been studied mathematically by Dr. Schroeder, and the formula upon which the lens is compounded has been worked out by him. The lens is truly aplanatic, giving brilliant pictures of life and still objects, and it works so rapidly that it is specially adapted for detective camera or other instantaneous apparatus. Considerable interest has been excited amongst American

photographers by the firm's new portable divided camera, which works either on a stand, as shown, or as a detective camera. Its peculiarity is that it has two lenses, which are focussed simultaneously by one movement, and by a reflecting arrangement the upper one throws the image, which is upon the plate, on a dark-slide at A, so that the operator knows exactly what picture he is taking, and can adjust the camera to any modification of the picture which he desires. The Geneva Optical Company themselves show several specialities, amongst them "Graphol" developing-powders. These are an eikonogen developer, put up in seidlitz-powder style, in paraffin-paper, with an outer wrapping—a form of package which keeps the developer-constituents indefinitely. We have not seen the plan adopted in England, although it is a good and simple one.



#### W. WATSON & SONS, OF 313 HIGH HOLBORN, W.C.,

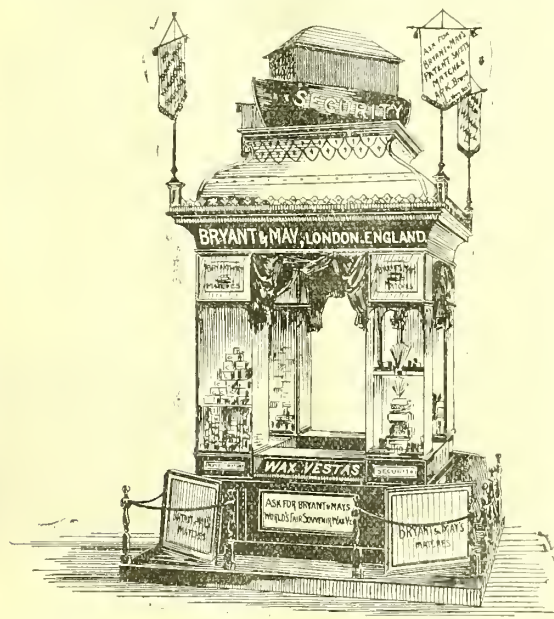
have the same cases in the Liberal Arts Gallery as they had at the Paris Exposition, one of them being devoted almost exclusively to microscopes and slides, and the other to photographic and lantern apparatus. The contents of the cases are, of course, different from what were shown in Paris. The microscope section is one which does eminent credit to British workmanship, since it gives as good an indication as could be desired of the capabilities of English houses to cope with the requirements of the highest microscopic research. This is specially exemplified in the microscope which they originally constructed to the order of Dr. Henri van Heurick, Botanical Gardens, Antwerp, and is specially adapted for research-work, and photo-micrography with high powers. The adjustments in this instrument are extremely delicate—the fine one, for example, being sensitive to a motion of  $\frac{1}{13000}$  millimetre, or  $\frac{1}{33000}$  inch, and it is perfectly rigid at that—a feature of the highest importance in photography. Fine adjustments are attached to the body and sub-stage, both



being on the same principle, and they can be worked simultaneously. A full description of the instrument would occupy too much space, but we may say that in respect to mechanical arrangements and facility of manipulation the instrument is one of a truly perfect character. With it are examples of all the microscopes (educational, &c.) made by the firm, and an exceedingly complete selection of mounted objects. This is a branch of work which Watson & Sons have recently developed. They have a laboratory devoted to the mounting of the more common objects, and specialists in various parts of the country work for them, the requirements of the public health examinations having created an extensive demand for objects illustrating the bacteriology and pathology of infectious diseases. We are informed that 99 per cent. of British science classes related to public health use the Watson slides, and reciprocation between such schools of bacteriology as those of King's College and Cambridge serves to keep the department in line with the latest researches. The exhibit, therefore, contains many objects which are quite new to American bacteriologists, and as they have the opportunity of examining these, they have the means of learning how far we have progressed in this important department of medical education. Watson & Sons also show photographic goods, including their aluminium-mounted cameras, barometers, telescopes, and engineering and other instruments of precision.

#### BRYANT & MAY'S EXHIBIT

well deserves the attention of Americans, for if there is a country far behind in the match line it is the United States. If one asks a Pullman-car traveller for a light, he produces a box of those miserable old-fashioned lucifers, the vesta being almost unknown. Here matches are packed in boxes cross-



ways, a box holding the equivalent of two of Bryant & May's safeties retailing at 5 cents. The Bow firm show that they can cater for that trade, but their exhibit of English styles, especially of vestas, is what gives them most credit. A feature on the base of the case is "Bryant & May's Wax Vestas," in letters 6 inches long, and formed from 60,000 vestas, with heads upwards.

#### W. RANSOM & SON, OF HITCHIN.

occupy in some respects a unique position in the Exhibition. The preparations which they show are numerous, yet they have succeeded in putting them all in an upright case about 30 inches square, which is less than their floor-space but the rest is raised, floor-clothed, and surrounded by a rope barrier. The case contains a blue-plush-covered stand, and on the place of honour is a large vase of Hitchin lavender-

water. The firm are distillers of lavender oil, as well as of the oils of peppermint, savin, sassafras, and several others not exhibited. We understand that Hitchin oil of peppermint has a peculiarity which distinguishes it from all others, its density being greater, and the aroma is, if anything, better than Mitcham oil. It is as makers of medicinal extracts that the firm are chiefly noted, and of these typical specimens are shown, most of them being in common use in the United States—powdered extracts, for example, and the green extracts. We also notice all the B.P. juices, and it may interest the doubtful to know that succus taraxaci and ext. taraxaci liq. are almost indistinguishable in appearance. Mr. F. Ransom states that the latter is, if anything, the better preparation, and that it should not be confounded with the old-fashioned dark and thick liquor, which is not B.P. Scammony resin and elaterium are amongst the other contents of the case. The elaterium shows how quickly some drugs are affected by light. When the sample was placed in the case it was of a bright-green colour—now, after a month's exposure, it is grey.

#### RICHARD USHER, OF BANBURY,

confines his exhibit to a few plant-juice extracts (the taraxacum has a layer of mould over it) and the preserved juices of hemlock, taraxacum, henbane, and belladonna, and some fine henbane-leaf. Perhaps the most interesting part of the exhibit are six samples of English rhubarb, three from *Rheum officinale* and three from *R. rhaponticum*. All the samples are trimmed differently, some of them being of extreme boldness, so as to closely resemble Chinese rhubarb. The fracture of the *R. officinale* shows grey and white striae, and that of the *R. rhaponticum* is red and white, so that in medicinal properties it should equal Chinese rhubarb.

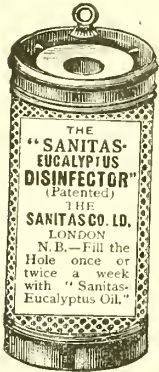
A few firms in addition to those mentioned have made arrangements for exhibiting their manufactures, but up to the time of writing those are all that our representative has seen in place. The Royal Microscopical Society make an exhibit of photo-micrographs.

#### A HOMŒOPATHIC HOSPITAL.

Homœopathy is a much greater power in the United States than it is anywhere else in the civilised world, and the practitioners of it are so numerous that those in Chicago alone have testified their devotion to their creed by erecting a homœopathic hospital in the grounds of the Fair. The hospital is a handsome-looking quadrangular building, which stands near the Sixtieth Street entrance. It consists of two floors, the lower one containing reception-rooms, a pharmacy, and accommodation for the caretaker. The upper floor is reached by a wide staircase, which lands us in a gallery giving access to some eight or ten rooms. One room is fitted with three beds as a female ward, and next door is similar accommodation for males. There are also an operation-ward, with instrument and sterilising-rooms adjoining it, and accommodation for the resident physician, Lincoln S. Browne, M.D. The house-surgeon is M. A. Barker, M.D. Dr. Browne devotes his whole time to the hospital, and he sleeps in it. The furnishing looks somewhat bare, and our representative said so to Dr. Browne, who replied, "You can tell the English people that that's how we like things here. We want no carpets or hangings to harbour germs. These chairs, you see, are made of coppered metal, and that's in the programme too." "To be consistent, Dr. Browne, I should think homœopaths should not use the surgeon's knife; your principles are against that." "Oh! we know how to operate. You see these instruments." "Yes, they are very fine; but why not use your medicines?" "Well, cases are sometimes desperate." There were no patients in the hospital when our representative called, but he was told that there have been a number since the Exposition opened—persons who asked to be treated homœopathically when they were taken ill in the grounds.

**RAPID PAINTING.**—The work of painting the World's Fair buildings in the ordinary way was too herculean a task even for Americans, and the plan adopted ultimately was to pump on the paint through pipe and atomiser nozzle. It was thus done rapidly and cheaply.





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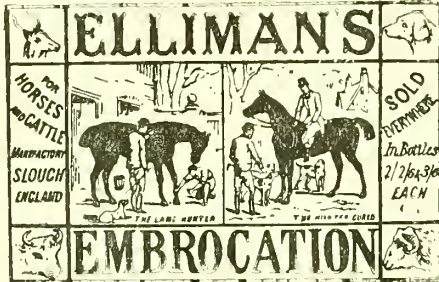
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## THE VINEGAR QUESTION.

THE correspondence which has been published in this journal on the vinegar question has certainly tended to show that the vinegar prosecutions and convictions which have been reported of late are not legally justifiable. We do not care to pose as the advocate of the pyroligneous-vinegar vendor, but we cannot think he has yet had the advantage



of as strong a defence in magistrates' courts as could be made, or so much as is necessary to dislodge the reverence of magistrates for anything that looks like official authority. It has been shown conclusively by Mr. Johnstone in the letter we publish this week that "wood vinegar" is as well recognised a term as malt vinegar. Mr. Allen himself, in his "Commercial Organic Analysis," quotes the term, adding, it is true, that in this case the description vinegar is "improperly extended." The basis for the charge of impropriety is not explained, nor, though magistrates endorse it, do they make it clear why they do so. Many of the authorities who are quoted by Messrs. Allen and Moor, in the article we printed on June 17, are obviously stating what they believe to be facts, but without sufficient knowledge. Nearly all these cyclopædia compilers quote one from another, and not once in a hundred times does one of them ever think of verifying his statements. One after another they state that vinegar is a fermented article. They did not know, and probably few of us had realised, that, as a matter of fact, wood vinegar was gradually being substituted in cheap trade for the kinds produced by fermentation. It may or may not be a subject for regret that this should be so, though nobody has yet produced a scrap of evidence in support of the assumption that the "wood vinegar" is in any respect less wholesome than any of its fermented relatives. But that is scarcely the point. The question is whether, when vinegar is asked for, it becomes legally necessary that one particular variety of the genus should be supplied. The analysts say it is not right to supply "wood vinegar" unless it is expressly asked for as such. But what is sauce for the goose is sauce for the gander, and the implication that the same argument should not apply to malt vinegar is not easily explainable. Inspectors and analysts, it would appear, are to have a monopoly in looseness of language, but it will strike impartial observers that in these prosecutions when fraud is practically alleged, magistrates should be very particular to insist on the strictest proof. If wood vinegar be supplied when malt vinegar is asked for, an offence is unquestionably committed. On the other hand, if the customer can get what he wants by the simple process of merely asking for it, is there any particular grievance in asking him to make his demand explicitly? Time is precious, we are aware, but the alternative is between an extra syllable on the part of the buyer and a 40s. or 5l. penalty from the seller.

In view of these considerations, we cannot congratulate the learned Recorder of Birmingham on the careful, but, as we cannot help thinking, somewhat biassed, judgment which he delivered on Tuesday in the case which came before him on appeal. The Recorder said truly that the question at issue was simply whether the substance which had been sold was entitled to be called vinegar. It was shown to him that the article had been called vinegar, not only by the public, but also by scientific authorities and by the Board of Inland Revenue for many years; and, more than that, it was argued that it actually and essentially was vinegar as truly as the fermented article. On the other side, the only evidence, so far as we can trace, was the opinion of several analysts that this stuff was not worthy of the name of vinegar, and this view was adopted by the Recorder as if it proved anything.

### THE SCARCITY OF CAPE AND CURAÇAO ALOES.

THE drug-sales of the present year have been noteworthy on account of the very small quantities of Cape and Curaçao aloes that have been offered at them. The scarcity of both varieties appears to be the natural result of the extreme fall

in prices caused by the over-production of a few years ago. Curaçao aloes first began to appear in large quantities upon our markets some fifteen or eighteen years ago—at any rate, before that period it was scarcely known by a generic name. Small parcels may have been shipped occasionally from the sterile West Indian Islands, the largest of which has given its name to the variety; but if they were, the importers simply merged them into the Barbadoes aloes, which was then the only known West Indian variety, and, though no longer actually produced nowadays, still figures, by force of habit, in most wholesale price lists. It is questionable whether there has ever been any difference other than that produced by various degrees of skill in the manufacture between the Curaçao aloes of the present day and the Barbadoes aloes of former times, but it is certain that the latter was prepared with much greater care than appears ever to have been bestowed upon the Curaçao variety. It is said that sugar-growing, poor as that industry has become, pays the Barbadians better than the extraction of the aloes-juice, and it does not appear likely at present that Barbadoes will ever rank again as an aloes-producing country. Curaçao has spoilt its own market by shipping, between 1885 and 1892, such large quantities to America, London, and the Continent that all these markets were gorged, and the prices fell to a point at which they scarcely paid for the carriage of the drug to the place of sale. Curaçao still exports a little, but until the value of her aloes improves very considerably she is not likely again to play a leading part in the business.

Cape aloes, rather because of the heavy production of the Curaçao variety (which is, to some extent, a competing kind) than on account of any excessive output in South Africa, has also suffered a depreciation which would not have been thought possible some years ago, and although since the autumn of last year the price of the best description has risen from 25 to 30 per cent. by slow stages, it is even now below the level it had ever been known to touch previous to 1887. The statistical table which we publish below, and which has been carefully compiled from our records, shows the chief fluctuations in the London market-price of good bright hard Cape aloes for the last eighteen years, and may be studied with advantage by dealers interested in the drug:—

Year	Jan. Feb.	March-April	May-June	July-August	Sept.-October	Nov. Dec.
1876	39'	36'-39'	40'-44'	—	48'	50'
1877	51-50'	48'	49	59/6	54'	51'
1878	49'	40'	43'	—	50'	44'
1879	38'	46'	50'	—	55' 60'	44'
1880	40'	46	46'	52'	45'	—
1881	45'	47	—	—	64'	—
1882	48/-49'	60'-62'	62/-63'	90' 70'	55' 56'	46'
1883	46'	56'	67 6	52'	—	45'
1884	50'	—	47	—	—	38'
1885	34'	38/-40'	42'	41 40	—	29/ 30/
1886	33	—	33'	—	33, 34'	—
1887	25'	28'	30, 27'	30'	—	—
1888	24 1/2	22'	30	21-22'	—	—
1889	21 3/4	20'	—	—	—	30'
1890	27 6	25-26'	23 6	24	20 6 21'	—
1891	21 6	20 6-21	—	28-30'	19	—
1892	19 19/6	—	25'	22, 23	20 6-21'	22'
1893	21	23'	30	—	—	—

The highest point ever reached by the drug was in the month of July, 1882, when good to fine Cape aloes sold at auction in London at 87s. 6d. to 90s. per cwt. There had been a great scarcity of the drug all though the first half of the year, and the extreme price referred to was caused by the report that no juice had been boiled in Cape Colony that season on account of the extreme drought. As usual, that statement proved to be unreliable, and within a month of the auction which indicated the high-water mark in the

history of the drug the new season's arrivals poured in at such a rate that by the end of the year the value of good quality had fallen to 46s. per cwt.

Cape aloes are ready for shipment from South Africa immediately after the boiling process to which the juice is subjected, and in former years July was always looked upon as the month when the firstlings of the crop were due in London. From that period onwards until the late autumn the drug is supposed to arrive in larger or smaller consignments, and from December to June no arrivals are looked for. It is true that during the last few years there has been a tendency in the Cape aloes business, as in so many other departments of economy, to set at naught time-honoured precedents, but, upon the whole, the rule that the chief arrivals are received in London between July and October holds good. And it also deserves attention that the summer months are usually the time when Cape aloes is highest in price. The drug has an unmistakable tendency to climb up in value from the early spring until some time in June or July, and then to ebb away again until the close of the year. It is also a circumstance worth considering that when trade in South Africa generally is brisk little aloes is produced, as the work of cutting the leaves and boiling the juice is only resorted to by the natives when all other means of obtaining a living fail them.

## PHARMACEUTICAL ETYMOLOGY.

A NEW part of the Philological Society's new English Dictionary, edited by Dr. James A. H. Murray, been has lately published, covering words from "consignificant" to "crouching." It is alarming enough to be informed that within these apparently narrow limits 5,414 main words are comprised, together with 936 combinations expressly explained, and some thousands of obvious combinations which do not require individual explanation, and 1,190 subordinate words and forms. Of the 5,414 main words 1,203 are obsolete, and 171 alien or incompletely naturalised.

This section of the dictionary is not positively rich in interest for the pharmacologist: we make our usual excursion through its pages, however, gleanings from them such items of etymological lore as may prove instructive.

Among names of drugs and chemicals may be noted the following:—

**CONTRAYERVA**, a name given to the rootstock and scaly rhizome of species of *Dorstenia* *D. Contrayerva* and *D. brasiliensis*, (N.O. *Urticaceae*) native to tropical America. Used as a stimulant and tonic, and formerly as an antidote to snake-bites. In Jamaica the name is given to a species of Birthwort (*Aristolochia odoratissima*) still held in repute as an alexipharmic. The word is Spanish, and means "counter-herb," antidote.

(**OPAIBA**, or **COPAIVA**, is a Spanish adaptation of the Brazilian *Cupaubá*.

**COPAL** likewise is a Spanish adaptation of the Mexican *Copalli*, incense. The name was originally applied to the resin brought from Mexico, but it is now procured from Africa, India, New Zealand, and other countries, as well as from South America.

**COPPER** was originally called in classical Latin *Cyprium æs*—i.e., Cyprian metal, so called in Italy from its most noted ancient source, Cyprus. The "æs" was dropped, and the "Cyprium" gradually became "cuprum."

**COPPERAS** is an old chemical name, the exact origin of which is not certain. It comes through the French *couperose*, via Italian *copparosa*, mediæval Latin *cuperosa*, *cuprosa*. Diez explained the origin as = *Cypri rosa*, rose of copper,

corresponding with the Greek *Chalcanthos*, literally flower of copper. Murray, however, considers that this is fanciful, and believes the word to have been simply the adjective *cuprosa*, originally associated as *aqua cuprosa*. In old German and Dutch it was called *Kupferwasser* and *kupr water*. The blue, green, and white copperases are explained as originating in mediæval times when the difference of composition was but vaguely apprehended. Copperas was a "species" occurring in different colours, and the phenomenon of the dissolving of iron by a solution of green copperas, with deposition of its copper, was explained as conversion of iron into copper by the mediation of the copperas, which changed its colour from blue to green in the process.

**CORK** is either a descendant of the Spanish *Corcha*, *corche*, which is a direct or indirect derivative from Latin *Corticem*, bark, or it is from the Spanish-Arabic *Alcorque*, which is probably traceable to the Latin *Quercus*.

**CORIANDER** is traceable through the French *Coriandre*, Latin *Coriandrum*, Greek *Korianmon*. In Dr. Murray's opinion, the Greek was probably an adoption of a foreign word. He ignores—or, at least, does not mention—the old theory that it was derived from *Koris*, a bug. The word is found in Wyclif (as "co-iandre"), 1333, and before.

**COTTON** was called in Arabic *Qutn*, and in Spanish-Arabic *Qsion*.

**COURT-PLASTER** was so called from its being used for the black patches formerly worn on the face by ladies at Court.

**COWAGE** or **COWHAGE**, sometimes improperly called "cow-itch," is a perversion of the Hindi named *Kiwanch* or *Kawanch*.

**CREOSOTE** is a compound from the Greek *Kreas*, flesh, and *Sozein*, to save. Murray says:—"The word was intended to mean 'flesh-saving,' but the Greek for this would have been *Kreo(s)soos*."

**CROCUS**, the Greek *Krokos*, is believed to be of Semitic origin, the Hebrew *Kurkom*, Arabic *Kurkum*, meaning saffron and turmeric. The name was not known to the English herbalists of the sixteenth century, but saffron was called *Croh* in Old English, and *Croch* in Irish and Gaelic, having been imported from Latin. Crocus of antimony, of copper, and of iron, were names given on account of the colour of the oxides. **CROCUS**, the slang term for a quack doctor, is supposed to have originated in the Latinised name of Dr. Helkiah Crookes, author of "A Description of the Body of Man" (1815) and other works.

Among common medical terms we may refer to—

**CONSUMPTION** as the name of a disease which is traced back as far as Trevisa (1398), the following quotation being given:—"Whan blode is made thynne . . . soo folowyth consumpeyon and wastyng."

**CONTAGION**—from *con* and *tangere*, to touch—is a very old word, as may be seen from the fact that Chaucer (fourteenth century) several times uses it in a figurative sense. For example: "My Soul, That troubled is by the contagion of my body." The old version of Shakespeare's familiar lines in Hamlet—

The verie witching time of night  
When Churchyards yawn and Hell it self breaths out  
Contagion to this world

—is decidedly more effective than the modern reading.

**COQUELUCHE**, still the usual French term for whooping-cough, was somewhat common in English in the sixteenth and seventeenth centuries, and was first applied to a kind of grippe, or epidemic catarrh, for which patients covered their heads with a coqueluche, from the Italian *Cocolluccio*, Latin *Cucullus*, hood, cowl.

**CORN** on the toes is not of the same origin as corn, the grain. The latter comes to us through Teutonic and Slavonic forms



from the Arian type *Gruum*. Grain and kernel are from the same source. The original meaning is something that is worn down. A corn or grain is a worn-down particle. The corn on the foot is from the Latin *Cornu*, horn. In earlier English corns were called agnelles, angnails, agnails.

CORNEA, the name applied to the transparent convex-concave portion of the anterior covering of the eyeball, means horny, and is an abbreviation of *Cornea tela*, a horny web or tissue, so-called from the horny consistence of the part.

COUGH has enjoyed an extensive variety of spelling, the one that has remained being perhaps the most unnatural. It is akin to the German *Kuchen*, to cough: *Keuchen* or *Keichen*, to gasp. All these words, and their predecessors, are probably of echoic origin, representing sounds and actions made with the breath.

Other words more or less associated with pharmacy, the origin of which is of interest, are the following:—

COROLLA, as a botanical term, is the diminutive of *Corona*, a crown or garland.

CORONER was an officer of a county, district, or municipality, originally charged with maintaining the rights of the private property of the Crown. His official title, when instituted, was *Custos placilarum coronæ*, guardian of the pleas of the Crown. The officer is believed to have been first appointed by an ordinance dated 1194: "In quolibet comitatu eligantur tres milites et unus clericus custodes placilarum coronæ." The title was afterwards latinised as *Coronarius*, but by the time of Magna Carta had become corrupted into *Coronator*. In Edward I.'s reign it is found in Anglo-French legal language as *Coroner*. In the time of Edward II. it appears in English as *Coroner*, and by 1400 it had become fixed as coroner.

COSMETIC is derived from the Greek *Kosmein*, to arrange or adorn; from *Kosmos*, meaning order, the opposite of chaos.

COUNTER was originally the banker's or money-changer's table; and thence became the table where the money paid by purchasers was counted. The table on which goods are displayed, which has become the modern meaning of the word, is not implied in the name.

#### THE HUSBAND AND THE SURGEONS

A curious case has occurred in a London hospital. A woman suffered from a swelling in the neck and decided to undergo an operation under chloroform. The nature of the operation was explained to her, and she said she would go through it, whether her husband (who was away from home) was agreeable or not. She, however, wrote to her husband, and he sent a letter to the hospital authorities strongly objecting to the operation, as his wife had a weak heart. When the letter arrived the woman was dead, having succumbed to the effects of the chloroform. At the inquest the Coroner held that the husband's consent was not legally necessary, so long as the wife had consented. Legally necessary, perhaps not. But the circumstance is a curious piece of evidence of the husband's judgment, as compared with the combined wisdom of the hospital surgeons. These gentlemen will do well to respect lay opinion a little more in future.

#### CHEMISTS' CHARGES.

Correspondence on chemists' charges for dispensing is still proceeding in *Sala's Journal*. A Teignmouth pharmacist undertakes to explain to the readers of that journal the philosophy of the system on which chemists' profits are calculated. His arguments are excellent for chemists; but we do not see how they are going to influence purchasers to pay more at one place than they can get the same article for

at another, which is what was to be demonstrated. In his letter last week the Teignmouth chemist makes a curious statement. He says a Roman Catholic priest told him that his Church in a matter of conscience allowed chemists 70 per cent. profit on their business. He said, among other reasons, that they took into account the hundreds of preparations and drugs which chemists have to keep in stock and in good condition, many of which had to be thrown away spoilt, as they might only be used once or twice in a year, and perhaps not at all. Perhaps some of our Roman Catholic friends can tell us some more of this curious dispensation, if anything of the kind really exists. It is very good of the Roman Catholic Church to allow a 70-per-cent. profit, and it would be still better if they would secure it somehow. We presume the statement arises from a misapprehension of the old medicinal tariff which, we believe, was once in force in the Papal States, as it still is in Germany.

#### THE POISONING OF THE FUTURE.

In the July number of the *New Review* there is an article by Dr. S. Squire Sprigge, with the catching title used at the head of this note. Dr. Sprigge assumes that the public are alarmed lest the discoveries of science should enable the poisoners of the future to destroy their victims with less fear of detection than is at present before their eyes. Of course, no more in the future than now can science or law altogether check the straightforward murderer, as he may be called: the man who kills his wife or other enemy, with the distinct intention and expectation of swinging for it. But the poisoner is generally a more cunning criminal; he hopes and anticipates that he can accomplish his purpose secretly, and the question is discussed whether the development of our knowledge of alkaloids, ptomaines, and disease-germs is going to help him in these designs. Dr. Sprigge comes to the confident conclusion that there is nothing to fear. His argument may be summed up briefly in the statement that, so long as criminals are in an infinitesimal minority their evilly-applied science will never be able to cope with the means which the more righteous possessors of the same science will always have at their command to thwart them. This is, no doubt, sound logic as far as it goes, but its weak point is that neither Dr. Sprigge nor anybody else knows how many undetected poisonings there may have been. Dr. Sprigge quotes at length the Lamson case, and shows how the cunning medical poisoner was foiled. Good; but who is to say that Lamson, Neill, Palmer, and other medical men whose names figure in the Newgate Calendar are the only ones who have used their opportunities and their knowledge to base purposes? Dr. Sprigge also too readily assumes that it was the scientific evidence which convicted the poisoners we have named. We venture to maintain that neither Lamson nor Neill would have been hanged without the evidence of the purchase of the poisons they used which the Pharmacy Act ensured. We agree with Dr. Sprigge that the danger of poisoning will not be greater in the future than it is now, but we are inclined to the opinion that the risks of accidents are and will be much greater than those from criminals, and unless our present system of permitting the prescriber to also compound, and perhaps administer, the medicine, and sign the death-certificate, be altered, we do not see how the most serious of these chances is to be prevented.

DEPENDS ON THE BABY.—"Uncle John," said little Emily, "do you know that a baby that was fed on elephant's milk gained twenty pounds in one week?" "Nonsense! Impossible!" exclaimed Uncle John; and then he asked: "Whose baby was it?" "The elephant's," said the little girl.

## Legal Reports.

### IS COLOURED ACETIC ACID VINEGAR?

#### APPEAL CASE.

AT the Birmingham Quarter Sessions on Monday, July 3, before the Recorder, Mr. J. S. Dugdale, Q.C., William Kirby, refreshment-house keeper, Digbeth, appealed against a conviction by magistrates for having sold vinegar which was not of the nature, substance, and quality demanded.

Mr. Thomas Terrell and Mr. Norris T. Foster were counsel for the appellant, and Mr. Hugo Young and Mr. Symonds for the respondents.

Mr. Young explained that the conviction had been obtained under section 6 of the Food and Drugs Act. The question to be decided by the Court was—of what did vinegar consist? Wine which was allowed to go sour would produce vinegar. The alcohol in the wine was converted into acetic acid by a process known as acetous fermentation. In the course of the production of that acid the various properties of the wine remained and gave it a flavour and an aroma which could not be obtained from acetic acid alone. His clients defined vinegar as an article consisting essentially of impure dilute acetic acid, obtained by the oxidation of an alcoholic liquid. The real point of the present case was whether, without that alcohol as a basis, without which the other things which were the true properties of vinegar were not obtained—whether, merely because something was got which was in fact acetic acid, but without those properties, it was right to call it vinegar? The respondents wished to prevent the sale as vinegar of acetic acid made from the distillation of wood-fibre. If it was as good as and served the purpose of vinegar, the public should not be misled by a misdescription, but the article should be labelled by its distinctive name. It should be distinguished from vinegar as margarine was from butter. The question for the Court was—*is acetic acid vinegar?*

Thomas Davies, inspector of nuisances, stated that on April 13 he visited the appellant's shop in Digbeth, and was served with  $\frac{1}{2}$  pint of "vinegar," for which he paid 1d. He was told it was not malt vinegar.

Dr. Alfred Hill, public analyst, proved having submitted to analysis the sample obtained by the witness Davies. The analysis showed it to contain 70 per cent. of pyroligneous acid dilute. There ought to be no pyroligneous acid in vinegar. True vinegar was made from the juice of grapes or apples, or from grain. Acetic acid could be produced in a cheaper way than getting it from alcohol. Wood was a common source. The object in colouring the acid was to make it pass for vinegar. Acetic acid came chiefly from Germany.

Cross-examined: In his opinion distilled malt acid was not vinegar. He was not aware that persons who made that article were in the Act of Parliament called "vinegar-makers." He would not term vinegar any distilled vinegar without the qualifying adjective. He knew of no manufacturer who sold vinegar uncoloured. He believed so-called malt vinegars were coloured with caramel. The gum, albuminoids, and sugar in the vinegar had a tendency to produce a secondary fermentation. The vinegar manufactured nowadays was unfit for pickles. In the interest of the vendor he had rather understated the quantity of pyroligneous acid in the sample. The sample of vinegar had a disagreeable smell.

Mr. Otto Hehner, public analyst, said there was not a trace of vinegar in the liquid sold by the appellant; it was merely dilute acetic acid.

Mr. E. W. T. Jones, analyst, of Wolverhampton, said that it was only lately that the difference between the acid and true vinegar had been discovered.

Mr. A. H. Allen, analyst for the West Riding of Yorkshire, Derbyshire, and Sheffield, stated that diluted acetic acid, should not be called vinegar.

Mr. Terrell: What amount of vinegar do you say a person would take a day on an average?

Mr. Allen: I have known  $\frac{1}{4}$  pint to be taken.

Mr. Terrell: As medicine?

Mr. Allen: No, for pleasure.

Several tradesmen were called, who stated that when asked for vinegar they supplied malt vinegar.

Mr. Terrell, for the appellant, drew the Recorder's attention to the importance of the case, as that was the only tribunal which could decide the question. The question was—What was the scope of the word vinegar? He contended that any potable form of acetic acid might be defined as vinegar. A large industry had been built up in the last seventy and eighty years, and he was sure the Recorder would pause before destroying that industry by saying that that substance should not be sold as vinegar.

Professor Attfield, F.R.S., one of the editors of the British Pharmacopœia, said there was not one fluid that could claim the name of vinegar. It was a generic term. Vinegar properly prepared from pyroligneous acid was legitimately called vinegar. There was no malt vinegar made now. That term was a misnomer. The substances contained in what was called true vinegar besides acetic acid had practically no value. Acetic acid was not injurious to health, and performed all the functions of vinegar.

Dr. Suckling expressed the conviction that the products, other than acetic acid, in malt vinegar were of slight dietetic or therapeutic value. Commercially they were valueless.

Mr. H. Grimshaw, demonstrator at Owens College, Manchester, said that in his opinion wood vinegar was legitimately called vinegar, and for the last sixty years it had been sold as such.

Mr. F. Sutton, public analyst for Norfolk, said that the source of the vinegar must determine its aroma.

Mr. J. Taylor, of Torquay, public analyst and consulting chemist, said that dilute acetic acid had been sold as vinegar for very many years. It was very pure, and was superior to malt vinegar by reason of its containing neither sediment nor vegetable matter, the latter being liable to putrefaction.

By Mr. Young: He preferred the acetic acid coloured to the malt-trade vinegar, and thought that the term vinegar was justly applied to it.

By the Recorder: He had heard of champagne being made in England. If it were not made from the grape he should not call it champagne.

Mr. Henry Evans, Inland Revenue officer, stated that the Somerset House authorities recognised pyroligneous acid as vinegar, and compelled all manufacturers of it to hold licences.

Mr. B. Biggs, of London, drysalter, stated that since the beginning of this century vinegar had been made from acetate of soda. To his mind any acid with a pleasant flavour would be vinegar.

The Recorder: Is it the flavour, then, that makes the vinegar?—Witness: It depends upon the person's taste.

Mr. Woodway, of the City Vinegar Company, Bristol, said that he had made vinegar from pyroligneous acid, and took five prizes with it at the Paris Exhibition.

By Mr. Young: Witness in reality was the appellant in this case. Probably the public would not buy the diluted acetic acid so readily if they knew what it was.

Evidence as to the long-continued practice of selling the substance in question as vinegar was given.

Mr. Terrell, for the appellant, said that his clients had proved by the highest scientific evidence that, as far as dietetic or food value went, the vinegar in question was equal in every practical respect to that made from malt or grain. Vinegar, he contended, was a generic term to be applied to such substances which were sold as vinegar, and answered the purpose of vinegar, but when one wanted to distinguish one kind of the liquid from the other one must describe what he particularly required. Vinegar made from pyroligneous acid had been sold for many years, and the makers of the malt-grain vinegar had no exclusive right to the term "vinegar." The Act of George III. showed that "vinegar" and "acetic acid" were synonymous terms, for the Act made a person a vinegar-maker the moment he began to purify and rectify acetic acid, and brought himself within the cognisance of the Excise. This trade had been in existence for a hundred years or thereabouts, and its growth had never been attacked till a few months ago. It would be a very serious thing if the Court should come to the conclusion that this was an illegitimate and fraudulent trade, and if the appellants should be compelled to sell their product under another name than that under which they had legally, as he contended, sold it so long.



Mr. Young said that the object of such prosecutions as this was that when people asked for one thing they should not be given another. The contention that the defendants were recognised in certain Acts of Parliament for Excise purposes as vinegar-makers, and that, therefore, what they sold was vinegar would, if sustained, enable any person who treated acetic acid in such a way as to come under the Excise to sell any of his products, even pure acetic acid, as vinegar. The appellants' case really was that they only were entitled to call their product vinegar, and that the real malt vinegar must be given some specific name.

Mr. Terrell said that appellants had repudiated this construction of their case. What they contended was a person asking for vinegar might lawfully be supplied with either of the different kinds.

The Recorder said the question really was whether the substance which had been sold on this occasion by the appellants could be allowed to bear the name of vinegar. If it ought not to be sold as vinegar, then there had been sufficient prejudice to the purchaser to justify a conviction under the Food and Drugs Act. There was no dispute as to the constitution of the substance. As to whether it was entitled to be called vinegar counsel for the appellants had, with great skill and perseverance, endeavoured to establish the affirmative on three grounds. The first ground was that the substance was recognised by law as vinegar. Without going through the Acts of Parliament and the decisions that had been quoted, he (the Recorder) would say that he had come to the conclusion that the contention that vinegar and preparations of acetic acid were in law the same thing, could not be accepted. The object of the Acts of Parliament quoted was to take care that certain Excise duties were enforced, and for that purpose they enacted that persons who had or received into their custody and possession, amongst other things, any vinegar, or acetous acid, or other matters for certain purposes, should be deemed vinegar-makers. Those enactments did not mean to enact that acetous acids should be vinegar, or that the makers or purifiers of acetous acid or pyroligneous acid, although they were to be deemed vinegar-makers for the purpose of these Acts, should be entitled to have the acetic acid which they produced termed vinegar. He thought that the words "deemed to be vinegar-makers" showed conclusively that it was for the purpose of these duties that they were to be taken under the generic name "vinegar-makers," which included a number of things, and he could not hold that it had been recognised by these various Acts of Parliament that dilute acetic acid, coloured, was vinegar. The decisions that had been quoted, and which had reference to Excise questions, he interpreted in the same manner, and therefore the argument depending upon recognition by law was unfounded. As to the second point, whether this mixture was entitled by long use to be termed vinegar, evidence had been given that for a great number of years it had been sold as vinegar. On the other hand, it was admitted that the public had not known that it was merely dilute acetic acid coloured that they were buying, and that it had not been discovered by the public till quite recently, when the analysts had found it out, what the exact constituents of the substance were. Therefore, he did not think that this substance had made out its title by long usage to be recognised as vinegar. The third point made by the appellants was that the substance was really vinegar in point of fact. It was clear that before the invention of this substance the original definition of vinegar was a vegetable juice or infusion, which had passed through alcoholic or acetic fermentation. In the British Pharmacopœia, Professor Attfield defined vinegar as a substance "prepared from the immixture of malted and unmalted grain by acetous fermentation." He was surprised, therefore, to hear Professor Attfield say on Monday that this definition of vinegar, for which he was responsible in so important a publication as the British Pharmacopœia, was put in simply for the preparation of soap plaister. On the very same page of the book the Professor, alluding to vinegar, stated what the dose was to be; and he could not believe that a gentleman of eminence, who was responsible for so important a publication, could have been guilty of what would have been unpardonable carelessness of putting in such a definition of such an article as vinegar simply for the purpose of soap plaister. But in the Pharmacopœia, in addition to defining vinegar, Professor Attfield had also

defined dilute acetic acid. Therefore, he (the Recorder) came to the conclusion that, as far as Professor Attfield was concerned, the definitions of vinegar and of dilute acetic acid were distinct. Reviewing the other expert evidence, the Recorder pointed out that Mr. Allen had said that dilute acetic acid not produced by any process of fermentation was not vinegar, but was "as different from it as silent spirit is different from wine." In fact, in the evidence one might just as well be called upon to decide that alcohol and water was wine as that coloured acetic and water was vinegar, for alcohol was as much the essential of wine as acetic acid was the essential of vinegar. Therefore the case of the appellant seemed to be a *reductio ad absurdum*. Under these circumstances he was forced to the conclusion that what was sold in this case was not entitled to the name of vinegar. He did not think there was very much weight in the arguments of the great disturbance of trade that would be caused by a decision adverse to the appellants. In a case of that kind the law could not take that into consideration at all, but he would point out that a similar argument was used with regard to margarine. It was said that the public would cease to buy margarine if that substance were given its proper name, but it was common knowledge that the margarine trade was now in a more flourishing state than ever before. He had no doubt that his decision in this case, which, if it should be confirmed elsewhere, would have a far-reaching effect, would cause a good deal of disturbance and inconvenience to the manufacturers of this article. The substance, however, was no doubt extremely valuable for many things, and served the purpose of vinegar in many ways, and he could not help thinking that the discussion which had been raised by this case must have shown the public the value of the substance for what it was, as well as what it was not. The article appeared to be a valuable thing in itself, and would find its place in commerce, and therefore he did not think that in the end the manufacturers of it would be at any loss. But it was not entitled to be called vinegar, and consequently the appeal must be dismissed, with costs against the appellant.

IN the Glasgow Sheriff's Court, on Monday, July 3, three local grocers—Kennedy Campbell, 425 Victoria Road; Margaret Small, 215 Main Street, Gorbals; and William Laird, 110 Naburn Street—were charged at the instance of the City Sanitary Authorities with having, on May 26, sold a bottle of what purported to be malt-vinegar, but which on analysis by Dr. Clarke, the City analyst, was found to be merely diluted acetic acid.

One of the defendants was represented by Mr. William Barry, writer, who said he also appeared for the manufacturers, a firm in London, and tendered a plea of not guilty. He stated that on the labels of the bottles as supplied there was plainly printed "distilled malt-vinegar," and not "malt-vinegar," as stated in the complaint.

Mr. John Lindsay, the prosecuting agent, replied that the officer went into the defendant's shop and asked for a bottle of malt-vinegar, and he got something which was not malt-vinegar, but simply coloured acid.

Mr. Barry said he was going to prove that in the manufacture of the vinegar, malt pure and genuine had been used.

The case was adjourned till July 12. Seven similar cases will be ruled by the decision in this prosecution.

THE following report is from the *Grocer* of last week:—At Swindon Petty Sessions, on June 22, Mr. Luther Silverthorne, Regent Street, New Swindon, was summoned for selling vinegar not of the nature, substance, and quality demanded. Mr. H. Bevir prosecuted on behalf of the County Council. The county analyst certified the vinegar to consist of burnt sugar and acetic acid diluted with 97.15 per cent. of water. It bore no trace of true vinegar, of which it was only a colourable imitation. Defendant pleaded that he had acted in ignorance, and had sold the mixture in exactly the same condition as he received it from the wholesale house at Birmingham. Defendant promised to guard against a repetition of such sale. The Bench said the public must be protected from fraud, and fined the defendant 2*l.* and 1*l.* 2*s.* 6*d.* costs.

## THE NUNEATON SPIRIT-OF-NITRE CASE.

THE report of the above case which we published last week was received by telegram, and some interesting features of the evidence were somewhat condensed. The Warwickshire County Council were the prosecutors, and Dr. Alfred Bostock Hill, the County Analyst, was their principal witness. He stated that the analysis showed the liquid to be deficient of at least 30 per cent. of ethyl nitrite, which was the constituent upon which the value of the drug depended. He described the production of the drug, and said without the ethyl nitrite it would be nothing but alcohol and water, with perhaps a trace of acid. In such a case the consensus of medical opinion was that it would be of no value. In cross-examination by Mr. H. Glaisyer, the witness said the specific gravity of the sample was 848.7, and the percentage of ethyl nitrite was 1.24. Witness could not give a reason for the deficiency of ethyl nitrite. There was only one drug that could legally be sold as sweet spirit of nitre, which he explained was a colloquial and not an official designation. There was a preparation known as sweet spirit of nitre; but this was made by an old process. Spirit of nitrous ether had been known since about 1851, and was legalised by the Pharmacopœia of 1885, for it had superseded the old drug known as sweet spirit of nitre. The drug was used by the public to produce perspiration and as a diuretic, and for these it depended on the presence of the ethyl nitrite.

Mr. Glaisyer, in defence, contended there were two distinct drugs, and maintained that Dr. Hill had no warrant for stating that spirit of nitrous ether had superseded sweet spirit of nitre. For the past two years so large had been the demand for this drug that the reporter of the Medical Council had recommended it should be included in the Pharmacopœia.

Dr. Hill, recalled, said the old drug was anything or nothing; but the sample submitted to him for analysis contained 1.24 per cent. of ethyl nitrite, and should have contained 2 per cent.

The defendant, in evidence, said he bought his drugs from the best firms in the trade. The drug in question was purchased from Messrs. Evans, Leseher & Webb. He kept both the drugs that had been referred to, and produced price-lists in which sweet spirit of nitre and spirit of nitrous ether were both quoted. When asked for sweet spirit of nitre he always supplied the drug sold in this case.

Michael Conroy, director of the laboratory of Messrs. Evans, Sons & Co. and Messrs. Evans, Leseher & Webb, wholesale druggists, said spirit of nitrous ether was first introduced in 1867. This preparation was different from the older preparation known as sweet spirit of nitre, which had a sale five times as large as spirit of nitrous ether. In cross-examination, he denied that the drug depended for its value on the presence of ethyl nitrite. The difference in price was due to the presence of more alcohol in the spirit of nitrous ether, and not because there was more ethyl nitrite.

Mr. F. H. Alcock, analytical consulting chemist, Birmingham, practically agreed with Dr. Hill as to the analysis; but considered the sample sold to have been properly sold as sweet spirit of nitre. The preparation was not in the Pharmacopœia; but he believed sweet spirit of nitre would shortly be included.

The Bench decided to dismiss the case, and, upon the application of the defence, granted costs to the amount of 5*l*. One of the Magistrates remarked that it was perfectly clear there was no fraud on the public, either wilfully or by accident.

## A COCOA APPEAL CASE.

AT the Glamorganshire quarter sessions on Thursday of last week, before Mr. J. Coke Fowler and Judge Williams, Mr. Thomas Jones, grocer, appealed against a conviction by the Ystrad magistrates under the Sale of Food and Drugs Act. On December 22 last, Superintendent Jones purchased from the appellant a packet of cocoa, for which he paid 2*l*. He then stated that he had bought the cocoa for the purpose of analysis, and offered to divide it, but the appellant declined the offer, observing that he bought the packet as cocoa and that he sold it just as he got it. The county analyst certified that it consisted of 30 parts cocoa

and 70 parts starch and sugar. It was admitted that the cocoa did not contain pure cocoa, it was what was known as Fry's pearl cocoa, but Mr. Lewis, for the appellant, contended that the seller was protected by a label containing these words "contains cocoa combined with other ingredients, the perfect purity and wholesomeness of which are guaranteed in accordance with the Act of Parliament." Respondent however said that when the packet was handed to him, this notice was entirely concealed by the wrapper of white paper, and it was submitted that this circumstance took the packet entirely out of the Act. According to the 8th section of the Act, the notice must be distinctly and legibly written or printed so that it could be seen by the customer at the time of purchase.

Judge Williams considered it was the business of the respondent at the time he bought the packet to see what he was getting. He could have asked the appellant before wrapping up the packet to let him see what was on the label.

Mr. Stephen for the respondent further contended that the 70 per cent. of starch and sugar was fraudulently added to the cocoa in order to increase its bulk. This was strongly combated by Mr. Lewis.

Mr. Joseph Fry, of Messrs. J. S. Fry & Co., cocoa-manufacturers, Bristol, said that the respondent got for his money within a fraction actually twopennyworth of pure cocoa, plus the sago and sugar. This pearl-cocoa had been in the market for between thirty and forty years, and the ingredients of which it was composed had been substantially the same during its entire manufacture. He said the sufficiency of the notice on the packet had never been successfully questioned in any court of law. The sugar and sago were added in order to make the cocoa easily soluble in boiling-water.

After conferring together, the Chairman said the court were divided, and the decision of the justices below would therefore stand. Mr. Lewis asked for a case on the two points raised, the sufficiency of the notice and the alleged fraudulent addition to increase the bulk. This was granted, costs to abide the appeal, but in the event of the appeal not being proceeded with, costs to be borne by the appellant.

## EMPLOYERS' LIABILITY.

IN the City of London Court, on Monday, before Mr. Commissioner Kerr and a jury, the case of *Roberts v. Lawes* was heard. The plaintiff, Timothy Roberts, 12 Princes Square, St. George's, sought to recover the sum of 150*l*. as damages for personal injuries sustained through the alleged negligence of the servants of the defendants, John Bennet Lawes & Co. (Limited), chemical-manure manufacturers, of 29 Mincing Lane, E.C.

Mr. Vennell was counsel for the plaintiff, and Mr. Tatlock for the defendants.

The plaintiff's case was that on March 9 he was in the service of the defendant company as a labourer, and was working on a corrugated-iron shed when one of the portions of it gave way, and he fell to the ground a distance of 10 feet. He was working under the orders of one of the defendants' foremen, and was seriously hurt by the fall, being laid up for nine days.

The defendants' case was that the plaintiff was not seriously hurt at all, and that he was warned not to do his work in the way he was doing it because of the liability of the roof to give way. The defendants denied any responsibility.

The jury held the defendants liable, and awarded the plaintiff 10*l*. He was allowed the costs of the action.

## PLACING POISONED FLESH.

AT the Birmingham Police Court, last week, Guy Harrison, assistant in the chemistry department at Mason College, was summoned at the instance of Inspector Ruane, of the Society for the prevention of Cruelty to Animals, for having placed certain flesh impregnated with poison in his garden. It appeared that a cat belonging to a neighbour was found lying dead in the garden. The cat was believed to have been poisoned, and inquiries showed that defendant had placed meat upon which cyanide of potassium had been placed in his garden, and it was alleged that the garden was an un-



protected place, and that the cat having wandered there had been poisoned. The defendant admitted having placed the poison in the garden for the purpose of destroying rats, which caused him great annoyance, but denied that the garden was unprotected, as it was surrounded by palings and by a high hedge. The Bench dismissed the case.

#### TAKING VERBAL ORDERS AT SHOWS.

In the Nuneaton County Court, on June 17, before his Honour Judge French, Q.C., Thomas Taylor & Sons, veterinary-medicine dealers, Derby, sued J. B. Thompson, farmer, Attleborough, for 2*l.* 8*s.*, for goods supplied, 1*l.* 10*s.* was paid into Court, and the defendant disputed an item of 18*s.* on the ground that he had never ordered the goods thus charged for, which, it was said, were still lying at the Newdegate Arms. His Honour asked for the order-book, but the plaintiffs' traveller said the order was given verbally at the Birmingham Cattle Show. The defendant denied this. Judgment for the defendant, with costs.

#### AN UNFAIR MIXTURE OF CHICORY WITH COFFEE.

WM. McCULLOCH, grocer, 70 Regent Street, Liverpool, was summoned under the Sale of Food and Drugs Act, on Wednesday, for selling coffee which was unduly mixed with chicory. An inspector under the Act visited the defendant's shop on June 9, and asked for  $\frac{1}{4}$  lb. of coffee at 1*s.* 4*d.* per lb. He paid 4*d.* for the  $\frac{1}{4}$  lb., and the assistant on handling the article over told him there was chicory mixed with it. A portion of the sample was sent to the analyst, and his certificate was that there was a mixture of 45 per cent. of chicory in the coffee. The defendant said he always told people when the coffee was mixed with chicory, and sometimes they would prefer pure coffee. In reply to Mr. Stewart, the defendant said he charged 1*s.* 8*d.* per lb. for pure coffee, and chicory would be about 5*d.* per lb. The Magistrate considered the mixture an unfair one, amounting to adulteration, and fined the defendant 40*s.* and costs.

### Bankruptcies and Failures.

*Re* M. WILLIAMS, 27 Chancery Lane, W.C., Teacher of Chemistry and Chemist.

THE first meeting of creditors under this failure was held at the London Bankruptcy Court last Friday, before Mr. A. H. Wildy, Official Receiver. The debtor filed his own petition on June 15, and has been adjudged bankrupt by consent. He was formerly a director of the City School of Chemistry and Pharmacy (Limited), at 27 Chancery Lane, W.C., and has traded at the same address as a chemist. He started the City School in 1832. Seven years later it was converted into a limited company. Previous to that a sum of 500*l.* had been advanced by the debtor's wife for the purposes of the school, in consideration of which the debtor arranged to transfer to her two-thirds of the shares allotted to him in the company. The advance of 500*l.* was made by instalments during 1836 and 1837, chiefly for advertising purposes. The shares were not transferred as agreed, but the debtor subsequently handed to his wife a blank transfer for about 1,400 shares. The capital of the company was 2,000*l.*, in 1*l.* shares, the whole of which, with the exception of seven allotted to the signatories, were held by the debtor. The capital was increased to 5,000*l.* about two years ago, the public being then invited to subscribe, but only 140 shares were taken up, and the total amount received in respect thereof was only 70*l.*. The debtor received 200*l.* per annum from the company as salary, and he drew a further 100*l.* a year. He rents the shop at 27 Chancery Lane, and various rooms above, which he sublets to the company. The shop is held on a twenty-one years' lease, at 130*l.* per annum rental. About six years ago the debtor arranged with a Mr. Gum to bring out certain proprietary articles, amongst the number being "Cuca-tonic" and "Cuca-wine," the manufacture of which had now been abandoned. The partnership between Mr. Gum and the debtor lasted from 1887 to 1889,

the joint liabilities being discharged in due course. The manufactory was in Red Lion Square, and the offices were at 27 Chancery Lane. The debtor has deposited 500 of his shares in the City School of Chemistry and Pharmacy (Limited), with Mr. E. Harris, Tottenham Court Road, to secure advances amounting to 40*l.* On June 15 he was taken to Holloway Gaol on a judgment obtained by Messrs. Alexander & Sheppard, but was released two days later on payment of 4*l.* 10*s.* The household furniture was settled by the debtor upon his wife before marriage. The failure is attributed to losses in connection with the proprietary articles, and to heavy interest paid on loans. The debtor further states that he was able to pay his way up to the starting of the chemist's shop, about eighteen months ago. The largest creditors are: Mr. E. Harris, 216 Tottenham Court Road, 50*l.*; Messrs. Mitchell & Co., 70*l.*, for advertising cuca; Messrs. Bolton & Lardner, Birmingham, 286*l.*; and Mr. C. A. Harrison, Birmingham, 315*l.* With regard to the last debt, it appears that in October, 1891 300*l.* was advanced to a Mr. Reginald Harrison by that gentleman's father to defray expenses in connection with the chemist's shop, and in October last the debtor signed a bill of exchange for 312*l.*, thus rendering himself liable for the debt. He asserts that both Mr. Harrison and his father are equally liable for the debt, the shop having been opened by them jointly in the name of the company, whose moneys were also used therein. It was subsequently held that the chemist's shop was outside the objects of the company. No statement of affairs has yet been filed by the debtor, who roughly estimates his liabilities at 1,500*l.*, and his indebtedness to the company at about 300*l.* for overdrafts. The only available assets are 74 shares in the company, considered to have no present realisable value.

The meeting was adjourned to July 14, to enable the accounts to be filed, and proper notices to be sent to the creditors.

*Re* G. F. EYRE and T. B. GRIFFITHS, Stockport, trading as the Manchester Patent Lint Company.

THE gross liabilities of this debtor amount to 4,408*l.*, of which 3,295*l.* is expected to rank against the estate for dividend. The assets are estimated at 297*l.*, leaving a deficiency of 2,998*l.*

The report and observations of the Official Receiver show that the debtor, G. F. Eyre, commenced business in partnership with T. B. Griffiths in October, 1890. Until July, 1892, they traded at Ducie Mills, Corporation Street, Manchester. The works were then removed to Stockport. The debtor Eyre states that the machinery with which he started was given him by his brother-in-law, but beyond that he had no capital. The partnership was dissolved on February 22 last, the debtor taking over the liabilities, and he was to pay Mr. Griffiths 200*l.* by four instalments of 50*l.* each. None of these instalments have, however, been paid.

The debtor has had two meetings of his creditors, at the last of which a proposal was made to pay 20*s.* in the pound, the money to be found by debtor's relatives, but this offer has been withdrawn by them.

*Re* A. R. STOCKER, 29 Harvest Road, Holloway, Manufacturer of Feeding-bottle Stoppers.

UNDER the failure of this debtor, the first meeting of creditors was held last week, before Mr. A. H. Wildy, Official Receiver. The debtor has carried on business at various parts of London as a stopper manufacturer for many years, and is now employed as manager of the Stocker Patents Company, whose business is carried on at 90 Aldersgate Street, E.C. He started a business in July, 1888, at 83 Queensland Road, Hornsey, and, having no capital of his own, was financed from time to time by Mr. J. Warner, the present proprietor of the Aldersgate Street business, and a creditor to the estate for nearly 1,500*l.* An agreement was entered into three years ago between the debtor and a Mr. Hirst for the sale of the business to the latter for 2,500*l.*, but, owing to the death of Mr. Hirst in August, 1892, the agreement was never carried through. The landlord of the Queensland Road premises distrained in July, 1891, and sold off all the effects; but the debtor, in the hope of selling the business and patents to Mr. Hirst, kept on the premises, and now owes 113*l.* in

respect of rent since accrued. He deposited in 1889 and 1892 three patents for feeding-bottle stoppers of his own invention with Mr. Warner, who subsequently took offices at 90 Aldersgate Street, and engaged the debtor at a weekly salary of 2*l.* 10*s.* to work the patents. At present there is no sale for them, and the debtor is consequently unable to place any definite value upon that asset. He ascribes his failure to loss on the trading at Queensland Road, and to the expenses of developing newly-patented articles; also to the falling through of the purchase agreement with Mr. Hirst. No offer was made, and the creditors resolved to leave the case in the hands of the Official Receiver to be wound up in the usual course of bankruptcy. The debtor was ordered to attend the court on July 11 for his public examination.

*Re FIRMINGER & BEHREND, Mining Lane, E.C., late Colonial Merchants.*

ACCOUNTS have been filed at the London Bankruptcy Court under this failure, showing joint liabilities 12,31*l.* 18*s.* 6*d.* (unsecured, 5,817*l.* 9*s.* 10*d.*), and assets 2,482*l.* 7*s.* 11*d.*. Appended is a list of the principal creditors, viz.:—

*Unsecured.*

	£	s.	d.
Allan Brothers, 103 Leadenhall Street, E.C. ..	17	3	4
Bunnie & Co., 9 Mining Lane, E.C. ....	130	10	11
British and Foreign Wharf, Lower East Smithfield	14	0	2
Cooke & Lomer, Cophthall Court, E.C. ....	98	5	5
Dalton & Young, 29 Mining Lane, E.C. ....	161	2	3
Davies & Son, 9 Angel Court, E.C. (Trustees of Mrs. Behrend) .. .. .	2,000	0	0
Gray, Becker & Co., Dunster House, Mining Lane, E.C. ....	266	16	2
Hunt & Abrahams, Laurence Pountney Lane, E.C. ....	326	16	1
Johnson & Hicks, Dunster House, Mining Lane, E.C. ....	117	17	0
Jones, H., Mark Lane, E.C. ....	130	0	0
Laurence & Co., 21 Mining Lane, E.C. ....	13	0	0
Marshall & French, 37 Mining Lane, E.C. ....	55	18	7
Mohr, A. L., Hamburg .. .. .	38	1	11
National Telephone Company, Oxford Court, E.C. ....	20	0	0
Paradise, Dr., Surbiton .. .. .	193	8	2
Peckthall, Mrs., Holington .. .. .	1,043	0	0
Reynolds & Sellers, 3 Mining Lane, E.C. ....	11	5	0
Ripley, R., 3 Mining Lane, E.C. ....	36	2	5
Rowley & Maw, Newcastle .. .. .	11	8	3
White, Palmer & Co., 9 Mining Lane, E.C. ....	142	5	11

*Fully Secured.*

Anderson & Colman, 115 Fenchurch Street, E.C. ....	734	13	11
Superior Bank, Lothbury, E.C. ....	1,114	15	5
Miller & Tindal, 35 Mark Lane, E.C. ....	174	11	11
Paines & Reed, 32 Fenchurch Street, E.C. ....	45	10	4
Powell & Company, 27 Mining Lane, E.C. ....	57	9	8
Walker, H. & J., 41 Eastcheap, E.C. ....	376	13	4

*Partly Secured.*

Boisels, Friers & Co., 3 Cross Lane, E.C. ....	1,473	2	8
(Security valued at 1,196 <i>l.</i> 4 <i>s.</i> 4 <i>d.</i> )			
Carbutt & Co., 7 Mining Lane, E.C. ....	389	13	11
(Security valued at 204 <i>l.</i> 11 <i>s.</i> 3 <i>d.</i> )			
Latham A. W., & Co., Philpot Lane, E.C. ....	2,805	18	11
(Security valued at 2,412 <i>l.</i> 3 <i>s.</i> 6 <i>d.</i> )			

*Preferential.*

Daniel, T., & Co., 4 Mining Lane, E.C. ....	37	10	0
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The public examination of the debtor stands adjourned to July 20.

*Re GEORGE NEALE, Bacup, late Chemist and Druggist.*

THIS bankrupt attended the Oldham Bankruptcy Court on Friday of last week, before Mr. Registrar Tweedale, for his public examination.

In reply to questions put by the Official Receiver, the debtor said he commenced business as a chemist several years ago, with borrowed capital. The cause of his failure was keen competition and consequent small profits. He had been in Knutsford Prison, but was now at liberty. The examination was eventually closed, subject to the debtor filing an amended deficiency account.

*Re HERBERT JAMES GIBBINS, 72 Mark Lane, Chemical Merchant, trading as James B. Gibbins & Co.*

THE first meeting of the creditors under this failure was held last Wednesday, at the London Bankruptcy Court, before Mr. Le Howell, Assistant Receiver. The debtor, against whom a receiving order was made last May upon a creditor's petition, has furnished accounts showing total liabilities 2,080*l.* 7*s.* 7*d.*, of which 4,297*l.* 2*s.* 1*d.* are expected to rank against assets valued at 1,757*l.* 11*s.* 3*d.*. He commenced business in October, 1891, with 500*l.* borrowed money, and in the following June he pledged his stock to the petitioning creditors to secure an advance of 300*l.*. The failure is attributed to want of capital, depression in trade, bad debts, discounting bills, losses on contracts, and losses and liabilities upon accommodation bills.

The proofs having been dealt with, the Chairman said the debtor was not in attendance, and he understood that he (debtor) was the same man that was arrested recently and charged at the Guildhall Police Court with conspiring with others now in custody to defraud divers persons. The usual summary and observations upon the case would be sent round to the creditors in due course. The debtor had intimated his intention to make a proposal, but had not yet lodged it, and in the Official Receiver's opinion the creditors would not accept the offer, having regard to the whole circumstances of the case. After some discussion a resolution was passed to wind up the estate in bankruptcy, and Mr. Charles Lee Nicholls, 1 Queen Victoria Street, E.C., was elected as trustee to act with the assistance of the following committee of inspection—viz., Mr. E. Hunt (Edwin Hunt & Son), chemical-merchant, Wednesday; Mr. Henry Higginbottom (Higginbottom & Co.), chemical-merchant, Manchester; and Mr. H. L. Smiles, solicitor, Gracechurch Street, E.C. The following are the principal creditors, viz.:—

*Unsecured.*

	£	s.	d.
Clarke, W., Nottingham .. .. .	127	0	0
Clydesdale Banking Company (Limited), Carlisle ..	482	6	1
Findlater & Kerr, Manchester .. .. .	215	0	5
Gibbins, F. J., Percy Lodge, Wood Green .. .. .	50	0	0
London & South-Western Railway Company, Nine Elms .. .. .	45	18	10
Smiles, H. L., 79½ Gracechurch Street, E.C. ....	14	18	0
Walsh, Lovett & Co., Birmingham .. .. .	259	17	11
Weems, J. & W., Johnstone, N.B. ....	69	15	6
White, G. H., Backlbury, E.C. ....	22	10	1

*Fully Secured.*

British Empire Mutual Life-assurance Company (Limited), King William Street, E.C. ....	300	0	0
Knight, Hill & Co., chemical-merchants, Bellflower House, E.C. ....	346	13	0
Lloyds Bank (Limited), Lombard Street, E.C. ....	180	0	0
Williams & Co., 3 George Yard, E.C. ....	123	2	0

*Partly Secured.*

Discount Banking Company of England, 7 Lothbury, E.C. (security valued at 250 <i>l.</i> ) .. .. .	334	14	0
Higginbottom & Co., chemical-merchants, Manchester (security valued at 50 <i>l.</i> ) .. .. .	1,020	0	0
Hunt, W., & Son, Wednesbury (security valued at 1,000 <i>l.</i> ) .. .. .	1,538	10	9
Norris & Martin, 80 Bishopsgate Street Within, E.C. (security valued at 60 <i>l.</i> ) .. .. .	100	0	0
Norval, Alexander, Carlisle (security valued at 375 <i>l.</i> ) .. .. .	409	0	4

*Contingent Liabilities.*

Clement, G., Morris & Co., Liverpool .. .. .	60	2	6
Pitts, A. B., Bristol .. .. .	73	18	0
Rylands, Dan, Barnsley .. .. .	705	12	0

FOR REMOVING STAINS.—Soap-bark infusion may be made more efficient, says Mr. F. J. Welling, in the *Pharmaceutical Era*, by adding to a 10-per-cent. infusion an equal quantity of ammonia solution and about 1 per cent. of potash solution. Before drying, the goods should be thoroughly washed in soft water.



## Personalities.

MR. CHAS. CHESTER, foreman at Messrs. F. C. Hills & Co.'s chemical works, Deptford, has been presented with a gold watch by the workmen on his retirement after twenty-eight years' service in the firm and capacity of foreman.

AMONG the Civil List pensions granted during the last financial year, and which have not been published before, is one of 75*l.* to Mrs. Emilie Dittmar, in consideration of the services to chemical science rendered by her late husband, Professor William Dittmar, F.R.S.

THE will of Mr. William Foster, lecturer on chemistry at the Middlesex Hospital, late of 14 Clement's Inn, Strand, who died on May 23, at 50 Weymouth Street, Portland Place, was proved on June 22, by Mr. Frederick Foster, the brother, one of the executors; the value of the personal estate amounting to 3,354*l.*

MR. AND MRS. EDWARD EVANS, JUN., are to be presented by the Liberals of Wirral, Cheshire, with a testimonial, consisting of a massive silver gilt bowl, and a handsome diamond-star, at present on show at Messrs. Kirk's establishment, Parker Street, Liverpool. We understand the presentation will take place towards the middle of the month.

## DEATHS.

COLE.—Mr. Frederick Cole, chemist and druggist, Congleton, died suddenly whilst attending divine service at St. Peter's Church in that town last Sunday morning. The sad occurrence created a painful sensation, and the service was brought to an abrupt termination.

LESCHER.—On July 5, at Hampstead, Joseph Sidney Lescher, in his 90th year.

MAWDSLEY.—Peter Alfred Mawdsley, of the firm of Messrs. Smith & Mawdsley, chemical manufacturers, of Pentre, Flint, and Liverpool.

MULLOCK.—At Rock Ferry, Cheshire, on June 28, Mr. Richard Mullock, chemist and druggist. The deceased gentleman, until his retirement a few years ago, carried on business at Charing Cross, Birkenhead, where he was established since 1852.

WADE.—On June 19, at Forton, Mr. Mayall Wade, chemist and druggist, Preston, formerly of Mumps, Oldham.

## PUFF, PUFF!

[A banquet of Advertisers is shortly to be held.]

To think of five-score puffers all seated at a table,  
A-puffing one another just as hard as they are able :  
And each one just contriving (with a cunning eye to pelf),  
While he sings his neighbours' eulogies, to advertise himself.  
What heights of noble courtesy—no common folk could reach 'em—  
When C-R-R's little liver pills say pleasant things of B-CH-M !  
And Mr. K-NE declares aloud, "I swear upon my soul, man,  
Where'er I eat my beef at home I season it with C-L-M-N."  
And Sozodont, not left behind in compliments by K-NE,  
Says he polishes his wisdom teeth with fragrant Floriline.  
And Anti-Stiff declares his faith—which causes a sensation—  
In ELL-M-N's, the muscle-friend's, delightful embrocation.  
And Mrs. W-N-S-W—bless her heart, the name just makes me chirrup—  
Holds nought in all the world can match with Mother S-G-L's Syrup.  
And L-M-U-GH quite outshouts them all, "No mere saline for me, no,  
I always cure the mulligrubs by drinking quarts of E-O."  
And finally the Sunlight Soap—I wish I had some shares—  
With tears of joy proclaims the name and fame of Messrs. P-R-S.  
In short, I wish my feeble tongue more faithfully could utter  
The thoughts evoked by dwelling on this feast of mutual better.

—Punch.

CARBOLIC ACID IN TYPHOID FEVER.—Professor Charteris's opinion that pure phenol is almost a specific in typhoid fever is also held by Dr. Rodger Sloan, of Galashiels, and by Dr. John Candy, of Torquay. See *C. & D.*, this volume, p. 19.

## DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act making any of these arrangements binding upon dissenting creditors.

**Best, James**, lately 41 Moorgate Street, E.C., now residing at 54 Kensington Road, Clapton, chemist. Trustee, Wm. Judd, 15 Wallbrook, E.C., accountant, with a committee of inspection. Dated June 27, 1893; filed June 30, 1893. Unsecured liabilities, 249*l.* 10*s.* 2*d.*; estimated net assets, 228*l.* 6*s.* 3*d.*; creditors fully secured, 11*l.* 10*s.* The following are scheduled as creditors:—

	£	s.	d.
Cavendish, Edinburgh & Co., London .. ..	14	19	7
Cordell .. ..	57	8	9
Galbraith, Grant & Co. .. ..	39	15	0
Herrings & Co. .. ..	23	14	8
Meggison & Co. .. ..	24	0	6
Oliver .. ..	22	1	8
Sutton, W. & Co. .. ..	17	17	6

**Watson, John T., & Co.** (Charles Frederick Thew, trading as), 118 Snowfields, Brompton, and 115 Chancery Road, Peckham, Drysalter. Trustee, John Stott, 46 Market Place, Manchester, accountant, with a committee of inspection. Dated June 29, 1893; filed July 5, 1893. Unsecured liabilities, 1,200*l.* 15*s.* 1*d.*; estimated net assets, 422*l.* 10*s.* 8*d.* The following are scheduled as creditors:—

	£	s.	d.
Duche & Sons, London .. ..	21	14	10
Duncan, W. A., Newcastle .. ..	68	0	0
Greenberg & Sons, London .. ..	40	0	0
Hart, H. B., & Co., London .. ..	23	12	10
Law, E., London .. ..	19	10	0
Storry, Witty & Co., Hull .. ..	20	0	0
Wallace, London .. ..	25	6	6
Wilson, Walker & Co., Leeds .. ..	22	5	0

**Peat, J., & Co.** (Joseph Peat, trading as), 31 Blackburn Road, Church, and also lately of 374 Blackburn Road, Accrington, chemist and druggist. Trustee, John T. Frankland, 15 Dutton Street, Accrington, P.A. Dated July 3, 1893; filed July 5, 1893. Unsecured liabilities, 1,036*l.* 13*s.* 4*d.*; estimated net assets, 405*l.* The following are scheduled as creditors:—

	£	s.	d.
Accrington and District Investment Company (Limited), Accrington .. ..	20	0	0
Accrington and District Investment Company (Limited), Accrington .. ..	30	0	0
Accrington Bank (Limited), Accrington .. ..	46	0	0
Church and District Investment Company (Limited), Church .. ..	66	0	0
Clay, Dod & Co., Liverpool .. ..	42	16	1
Cooper, M., Church .. ..	17	0	0
Evans, Sons & Co., Liverpool .. ..	65	0	0
Maenair, J. and D., & Co., Manchester .. ..	24	15	8
Oddfellows' Investment Company, Accrington .. ..	16	0	0
Oddfellows' Investment Company, Accrington .. ..	32	0	0
Peat, Henry, Accrington .. ..	318	15	0
Peat, Annie, Church .. ..	22	0	0
Satcliffe, Elizabeth, Accrington .. ..	30	0	0
Sumner, R., & Co., Liverpool .. ..	22	19	0
Thompson, John, Liverpool .. ..	16	4	4
Union Bank of Manchester (Limited), Accrington .. ..	75	0	0
Woolley, Sons, & Co., Manchester .. ..	40	8	3

HANDED IN AT AN ILLINOIS DRUG-STORE.—"Dereser i woant yew tu cend bi barer wn sqort linceed ile putt a tesponful ile peiprement tu it woant it tu stinck good fer har ile."—"Gents:—Have you got wat dey call penoline suppos. to be fur swetty feet & sofalt if you haf pleas let me know price & so falt."—"Sor Ples sent to me by Careir 35 sents Ida Farm for anothir fellier."—"Pleas gif boy one of dem Rappers wat you suck Babies Milk trou."—"Darser may ole women hes got the heves with hir wind send bie barrow 25 sence stuf fer teaw bust et up."

## Business Changes.

MR. J. N. BRYANT, chemist, of Ordnance Street, Chatham, has taken more commodious premises at 10 Railway Street, Chatham.

MR. T. B. GROVES, of St. Mary Street, Weymouth, has disposed of his business to Mr. Eyles, of Brighton. Mr. Groves will shortly make a holiday trip to Australia, to visit some relatives.

MR. G. C. TARGETT'S business at the Bridge Pharmacy Weymouth, will henceforth be carried on under the title of "Targett & Wiseman," the latter gentleman having been taken into partnership.

MR. J. H. LEWIS, chemist and druggist, of 22 and 24 Great Portland Street, Oxford Circus, W., and 212 High Road, Kilburn, N.W., has made extensive alterations to his business establishment at Kilburn.

MR. J. A. HAYNES, of Boscombe, Bournemouth, will shortly open business at Station Road, Parkstone. He has lately purchased the stock and fixtures from the trustees of the late Mr. Watts, of Dorchester.

THE business carried on for the past eighteen years by Mr. W. E. Manby at High Street, Tenterden, Kent, has been transferred to Mr. David Thomson Wilkie, who has lately filled pharmaceutical positions in Geneva and Paris.

MR. J. G. ATKINSON has transferred his branch business at 69 Loughborough Road, Brixton, to Mr. William Johnston, pharmaceutical chemist, who has managed the business for the past six years. The shop is built where Cromwell House, a suburban residence of the famous Oliver, once stood. Mr. Johnston therefore describes it as the Cromwell Pharmacy.

MESSRS. WYNNE TIGHE & Co., chemists, of 4 High Street, Exeter, have taken the shop next door to their present one and have made a handsome double-fronted shop from the two sets of premises. Above the plate glass of the windows are pretty panels of coloured cathedral glass, some of which are open for ventilation. The electric light has been introduced into the shop.

## TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," June 21, 1893.)

"THE GRIP," on device of globe on which stand, on hind-legs, two flies raising top-hats and claspings fore-legs, and other wording; for fly-papers. By R. W. C. Strong (trading as Christy Strong). 112 Oxford Road, Reading. The essential particular is the device. 172,284.

"CURATIVA BUCHANAN," curious geometrical device, and other wording; for sheep-dips or preparations. By J. Buchanan. Los Angeles, Buenos Ayres. The essential particular is the device. 172,331, 172,332.

"DR. TURNER'S SHAKER WONDER," portrait of the doctor, and wording; for a medicine for human use. By The Turner Shaker Medicine Company, 11th Street and Morrison Avenue, St. Louis, U.S.A. The essential particular is the portrait. 169,545.

"EM. PONCELET," as signature; for medicated pastilles and lozenges. By E. Poncelet, 4 and 6 Rue du Chêne, Verviers, Belgium. 172,757.

"GLYCERINE-AND-CUCUMBER TOILET SOAP," on floral label; for a toilet soap. By C. Sherwood and J. F. Fieldsend (trading as C. Grant & Co.), 4 Cotton Street, London. The essential particular is the floral device. 171,899.

"FACT," on black disc; for hair-lotion. By R. Morgan (trading as Goosey & Rogers), 51 Ben Jonson Road, Stepney, London. 171,060.

Magnified print of disc; for pills. By I. W. Nichall, 25 High Street, Belfast. 172,564.

"VINOLIA DENTIFRICE," and wording, on circular label; for a preparation for the teeth. By Blondeau et Cie., Ryland Road and Malden Crescent, London, N.W. The essential particular is the word "Vinolia." 172,722.

"QUEQUEMAX"; for perfumery and toilet articles. By T. B. Browne, 163 Queen Victoria Street, London. 172,942.

(From the "Trade Marks Journal," June 28, 1893.)

"THE SWIVEL EMBROCATION," device of a swivel, and wording; for embrocation for horses, cattle, &c. By T. C. Crompton, trading as Crompton & Co., 29 Windsor Bridge, Salford. The essential particulars are the word "Swivel" and the device. 171,682.

"BATTLE'S FLUID SHEEP-DIP," and pair of shears, sheep, and wording, &c., on black label; for fluid sheep-dip. By Battle, Maltby & Bower, Brayford Wharf, Lincoln. The essential particular is the device. 172,079.

Device of pincers, hammer, and knife on black triangular design; for horse and cattle medicines.—By T. Markham, C. S. Markham, and T. E. Markham, trading as the Stud Veterinary Medicine Co., Commerce Chambers, Leeds. 172,117.

"OIL OF THE NIGHT"; for a veterinary preparation. By Day & Sons, Crewe. 172,294.

"NICHOLL'S CELEBRATED BLOOD-PILLS," signature and wording and device of magnified drop of blood; for blood-pills for human use. By J. W. Nicholl, 25 High Street, Belfast. The essential particulars are the *fac-simile* signature and the device. 172,563.

"HOMOCEA," and device of hand with pointing finger and circular black spot; for a medicine. By Mary L. Bowden, 43 King William Street, London, E.C. The essential particulars are the combination of devices and the word "Homocea." 172,619.

"THE LONDON AND NEW YORK HYGIENIC MEDICINE COMPANY," and signature; for medicines. By the London and New York, &c., Company, 20 Prince Street, Vigo, Spain. 172,654.

"ROSALIA," and device of girl's head in a rose; for perfumed soap. By the Rosalia Company (Limited), 170 Sloane Street, London, S.W. The essential particular is the device. 171,287.

"VESTAL 'VINOLIA' SOAP" on oval-shaped tablet; for perfumed soap. By Blondeau et Cie., Ryland Road, London, N.W. The essential particular is the word "Vinolia." 172,724.

"SENALIA"; for perfumery and toilet articles. By Jeyes' Sanitary Compounds Company (Limited), 43 Cannon Street, E.C. 172,841.

"FERRET BRAND POLISH SOAP," and sketch of a ferret; for a polishing soap. By Goddard Bros., Casters Factory, Crawthorne Road, Peterborough. The essential particulars are the word and device of "Ferret." 171,196.

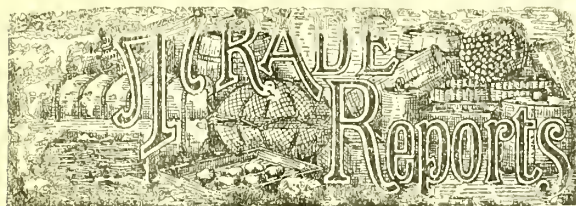
(From the "Trade Marks Journal," July 5, 1893.)

"BATTLE'S POWDER-DIP," pair of shears, and wording on black label; for powder sheep-dip. By Battle, Maltby & Bower, Brayford Wharf, Lincoln. The essential particular is the device. 172,078.

"BETHESDA MINERAL-SPRING COMPANY," as signature; for natural mineral-waters (medicinal). By the Bethesda Mineral-spring Company, Waukesha, Winconsin, U.S.A. 171,393.

THE "LILY" AND "BUBBLES," and circular device of teething-requisites; for teething-pads. The essential particulars are the words "Bubbles" and "Lily," and the combination of devices. 171,168.





**Notice to Retail Buyers:**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., July 6.

#### Failures in 1893.

From the statistics of failures which Mr. Richard Seyd, F.S.S., issues every half-year, we gather that the commercial mortality returns of the country are still on the rising grade. Low-water mark as regards failures in the United Kingdom was touched in 1890, when the total record (bankruptcies and deeds of arrangements) figured at 7,876. This advanced to 8,533 in 1891, to 9,609 in 1892, and for the first half of this year the score has already reached 5,319. Wholesale druggists seem to have been having an exceptionally good time. Only two deeds and no bankruptcies are declared against them. In the first six months of 1892 they figured for six of each. Retail chemists do not seem to have shared in the prosperity of their wholesale brethren. Against them 15 bankruptcies and 19 deeds are recorded, against 11 and 9 respectively in the corresponding part of last year. Looking among other trades and professions we note some interesting results. Comparing in each case the first halves of the two years, we find the failures of farmers number in all 329 this year and 234 last year; aerated-water dealers score 14 against 7; 31 surgeons, physicians, and dentists, have failed this year; while only 17 broke down in the first six months of 1892. As further evidence of the health of the community, it may be also noted that eight undertakers have been adjudicated bankrupt in 1893; while only one was so distinguished last year. Grocers are 563 against 548; drapers, 308 against 246; ironmongers, 55 against 75; newspaper proprietors, 9 against 3; publicans, 254 against 220; and private persons, 137 against 230.

**ACID (CITRIC).**—The makers ask somewhat higher prices, viz., 1s. 5½d. to 1s. 6d. per lb. for the B.P. article. One of them is said to have refused a bid of 1s. 5½d. per lb. Juice is quoted at 18l. f.o.b. for prompt shipment, but at 16l. 10s. for delivery next year.

**ACID (TARTARIC).**—A good demand prevails, and prices are steady at 11½d. to 1s. per lb. for B.P. acid from the English makers.

**ALOES.**—For good bright hard Cape aloes 30s. per cwt. has been paid privately this week. No aloes has been received by any of the recent steamers. Our stock here is now very small. Good Zanzibar aloes in skins is scarce and wanted, good hard Socotrine in kegs is worth 85s. per cwt. We hear from New York that about 500 boxes of good quality Curacao aloes have arrived there recently and were purchased for European account. It is said that, unless prices rise, no further arrivals of this aloes are to be expected. The Arab has just brought the first arrival of Cape aloes—a consignment of 10 boxes—from Mossel Bay.

**ANISE.**—The Sorata has just brought 486 sacks of Chilian anise.

**ARSENIC** has been reduced in price to 14l. 5s. per ton for best white powder, landed terms.

**BALSAM COPAIBA.**—The general tendency in the States is said to be downwards, although imports have not been very

heavy. Maracaibo balsam is wanting in New York, and Pará is rather scarce. Prices for these kinds range from 1s. 6d. to 1s. 6½d. per lb., c.i.f. terms, while Cartagena is offered at 1s. 4½d. c.i.f.

**BALSAM PERU.**—The market is now rather better supplied. Probably 6s. 6d. per lb. would buy fair quality of direct import.

**BUCHU.**—There has been a further arrival of 39 bales by the Arab from Cape Town to-day.

**CAMPHOR (CRUDE).**—The last business reported in China camphor was at the rate of 130s. per cwt. on the spot, and 113s. 6d., c.i.f., for shipment.

**CANARY-SEED.**—Lower. At auction 194 bags Turkish canary-seed sold, without reserve, at from 60s. 6d. to 63s. Spanish seed realised 60s. 6d. to 62s.

**CARAWAY-SEED.**—The first samples of the new crop of Dutch seed have come to hand, and show an excellent quality. From 27s. 6d. to 28s. 6d. per cwt. is asked for this seed. Russian seed offers at 20s. to 24s. per cwt., according to quality.

**CASCARA SAGRADA.**—Reports from America state that the new crop was being collected in June, and it is anticipated that the quantity will be ample for the demand that is likely to arise. There are also heavy stocks of old bark left, and the gatherers, therefore, have to content themselves with very low wages, which may operate to some extent against a heavy addition to the existing stock. Last year's bark is being offered at 34s. 6d., c.i.f., from New York, and new bark at 30s., c.i.f., by sailer from San Francisco.

**CHAMOMILES.**—The first samples of the new Belgian crop have just been received. It is said that they show an excellent quality, the flowers being white and of good aroma. The area under cultivation is said to have been large this year, but it is thought likely that there will only be one gathering. No prices have yet been fixed.

**CLOVES.**—Zanzibar cloves continue to fall. On the spot some business has been done at 2½d. per lb.; and for October-December delivery 2½d. per lb. has been accepted. At auction 151 bales sold at lower prices, mostly without reserve, 2½d. to 2½d. per lb. being realised for fair to good fair. Ten cases unpicked Penang sold at 5½d. to 5½d. per lb.

**COCOA-BUTTER.**—At the auction on Tuesday 200 2-cwt. cases of Cadbury's cocoa-butter sold at an advance of about 1½d. per lb. on the preceding sales—viz., at from 1s. 3d. to 1s. 3½d. per lb.

**COCA-LEAVES.**—Fine bright green Truxillo are being offered in quantities at 9d. per lb., c.i.f. terms; and good strong Huanoco at 1s. 4d. c.i.f., both descriptions being lower in price.

**COCCULUS INDICUS.**—Very dull of sale, and offering at 8s. per cwt.

**CROTON-SEED.**—Scarce, and wanted. The last price paid for fair quality was 36s. per cwt., but nothing has been offered for some time.

**CUTCH** is firmer. A considerable amount of business has been done, and for Star B cutch 32s. 6d. per cwt. is now asked; while MM in tablets is priced at 32s.; and Eagle at 29s. 6d. per cwt.

**DAMIANA-LEAVES** are reported dearer for America, and it is said that until next December no new leaves will be available. The prices run from 1s. to 1s. 3d. c.i.f., according to quality.

**ERGOT OF RYE.**—A very firm and rising market. For old Spanish ergot 2s. per lb. was paid to-day, but there is very little left on offer at that figure. The greater part of the parcels of Spanish ergot in London are for the present withdrawn from competition, being held at 2s. 4d. to 2s. 6d. per lb. It is reported to-day that Hamburg firms have been buying up parcels of ergot in the States, and, although that report may not be correct, there is no doubt that the Hamburg market is exceedingly firm, 1s. 7½d. to 1s. 8d. per lb. c.i.f. terms being at present quoted.

**GALLS.**—Turkey galls show no alteration. Blue Bussorah galls are held at 56s. 6d. to 59s. per cwt. according to quality;

Smyrna at 52s. 6d. to 56s. per cwt. Small sales of fine white Bassorah galls are also reported at 47s. 6d. per cwt.

GAMBIER.—Block gambier remains inquired for. A fair amount of business is reported, mostly for arrival, at from 18s. 3d. down to 18s. per cwt. according to position.

GUM ACACIA.—*Soudan* sorts continue to arrive, and owners would probably be prepared to accept somewhat lower rates in order to bring about business, but the trade are holding off. A lot of *Talca* gum recently imported has been privately sold, and another small parcel, which recently by auction realised 33s. per cwt. In Liverpool Bas-du-Fleuve *Senegal* has been sold recently at 45s. per cwt.

GUM KINO.—Still held for very high prices. There is only one package in stock, and for this 20l. per cwt. is asked.

GUM TRAGACANTH.—Very quiet, with small sales of fine Syrian hog gum at 73s. to 75s., and of inferior ditto at 55s. per cwt. The public sales on Friday, July 7, will comprise 1,318 packages of gum tragacanth, and 211 bags of hog gum.

HONEY.—The new crop of Californian honey is now ready for shipment, and both quality and quantity are said to be very good, fine white is being offered at 42s. c.i.f. terms sailer from San Francisco, amber 40s. ditto.

INDIGO.—The market for East Indian indigo remains very dull, and business is restricted in anticipation of the July auctions, which will soon be held, and for which 7,050 chests have been declared, including 3,857 Kurpah, 1,401 Bengal and Oude, 1,040 Bombay Hoodie and figs, 224 Manila, 228 dry leaf Madras, 48 Bimlipatam, and 9 Vellore. The stock of Bengal indigo in London has been reduced to 3,751 chests, and about 500 chests Bombay have been re-shipped to India. The deliveries of indigo for the first half of the year are 9,013 chests, against 8,129 chests in January-June, 1892.

INSECT-FLOWERS.—The new-crop flowers are now arriving in London, each steamer from Trieste bringing fresh consignments. Reports received here from Trieste say that the crop which has just been gathered has been a small one. Prices continue to advance, the present quotations for new flowers, compared with those for old crop on June 1, just before the gathering being as follows:—

	New crop July 1	Old crop June 1
	C.i.f. per cwt.	C.i.f. per cwt.
Closed flowers .. .. .	131-140	84
Half closed flowers .. .	105-108	77
Open flowers .. .. .	63-75	67, 6-63/

The quality is said to be, upon the whole, rather inferior to that of last year.

IPECACUANHA.—There has just been an arrival of 141 bales of ipecacuanha, all in one consignment, from Buenos Ayres. This arrival, added to the two of last week, aggregating 129 bales, has reinforced our stock to such an extent that, under ordinary circumstances, a sharp reduction in price might have seemed likely. As a matter of fact, however, notwithstanding these heavy arrivals, it is said that a good deal of business has been done privately, both in fine and medium qualities, at an advance of 3d. to 4d. per lb. upon the last auction rates. Professor Attfield has concluded his examination of the woody ipecacuanha, of which Mr. Cripps recently gave a certificate. His results, however, are not to be made known until Monday next, when a meeting of the Drug Club will be held to discuss the matter.

JABORANDI-LEAVES.—The stock in America is reported to be exhausted, all but two bales of brownish leaves, at 1s. 10d. per lb., c.i.f. terms.

JALAP.—It is said that the whole of the new crop has now been shipped from Mexico. *Vera Cruz*, fair quality, is offering cheaply at 11½d., c.i.f. terms.

JAPAN WAX very slow of sale. A sale of 100 cases. June and July shipment, at 33s., c.i.f. Continent, is reported.

LIQUORICE.—Common rough root has sold recently at good prices: from 6s. to 10s. per cwt., according to quality, being the present quotation. For good bright decorticated root, from 25s. to 30s. per cwt. is nominally asked.

OIL (CASTOR).—First *Calcutta* oil is nominally worth 3½d. per lb., but nothing is offered at the moment; *Seconds* are also scarce at 2½d. per lb.

OILS (ESSENTIAL).—American *Pennyroyal* is said to be in very small supply at present, but the new crop will be distilled at the end of this month. At present 7s. 6d. per lb., c.i.f. terms, is asked. *Spearmint* is being offered at 7s. in tins, and at 10s. 6d. to 11s. in bottles, HGH brand. It is said that these prices do not pay the producers, and that very little is likely to be distilled this season. It is also reported that the new crop of Michigan *Peppermint* oil will be late, and that the season has been very unfavourable for it, while little stock is left from last year's crop; a larger acreage than usual has been planted, however, this season. *Oil of bergamot* is reported slightly lower from Italy, the prices quoted being now from 8s. 10d. to 9s. 8d. per lb. f.o.b., according to quality. *Oil of Lemon* is also easier; the consumption this season, in spite of the hot weather, not having come up to expectations—5s. 9d. to 6s. per lb., f.o.b. is the current quotation.

OPIUM.—Some business is again reported in *Persian* opium, of which the crop is expected to be a very small one, 12s. per lb. being now the price for good quality. In *Turkey* opium business has been quiet, but holders are generally very firm, 13s. to 14s. per lb. being asked for good to fine soft shipping, 12s. to 12s. 6d. per lb. for good to fine druggists', and 11s. to 11s. 6d. per lb. for second druggists', although there are some sellers of the latter variety that would be disposed to listen to offers.

OTTO OF ROSE.—Several agents have now received reports on the crop from Bulgaria. All agree that the output has been quite up to the average, and some put it rather higher, say at 60,000 to 65,000 oz. The crops of preceding seasons were:—1892, 42,000 oz.; 1891, 69,000 oz.; 1890, 75,000 oz.; 1889, 82,500 oz. Turkish.

QUASSIA.—A sale of 13 tons logs, "without reserve," at this week's drysaltery auctions, caused a fresh decline in the article. The parcel realised from 5l. to 6l. 2s. 6d. per ton.

QUICKSILVER.—The importers' price is still 6l. 17s. 6d.; second hands, 6l. 17s. per bottle.

QUININE.—Quite a dead letter, no transactions whatever having been reported in the London market during the week under review.

SHELLAC.—Small sales at steady rates marked the end of last week, and on Monday only a few lots of fine TN *Orange* lac were reported sold at 110s. per cwt., cash terms; 100 cases AC *Garnet*, near at hand, being done at 93s., c.i.f. terms. At the auctions 679 cases met a very slow demand, and only 210 cases sold with very poor competition at unchanged prices for *Orange* and *Button* lac. *Garnet* was all bought in. *Second orange*, unworked, good bright cakey, brought 115s.; broken to fair bright reddish, 105s. to 107s. 6d. per cwt. *Button*, superior firsts (cakey), unworked, 140s.; ordinary dark to fair resinous thirds, 89s. to 98s.; low and inferior fourths, 67s. to 79s. per cwt. The speculative market closes inactive and easier, with sales of orange TN for September delivery at 110s. per cwt.

SOY.—China soy is very quiet at 1s. 7d. to 1s. 8d. per gallon. Thin China soy, however, is not worth more than 1s. 6d. per gallon. *Japan* brings from 6d. to 9d. per gallon.

SPERMACEI is still falling in price in Liverpool, business having been done there in Chilian at 1s. 2½d. per lb.

SULPHATE OF COPPER has fallen to 16l. in London, while the Macclesfield brand is held at 16l. 5s. f.o.b. Liverpool.

TONGUE BEANS.—The recent purchase in America in one lot of 13 tons of *Angostura* beans has raised prices by fully 1s. per lb. At present quotations are 7s. 9d. c.i.f. for guaranteed good quality. *Pará* leaves are plentiful and neglected at 1s. 10d. to 3s. 6d. c.i.f. according to quality.

TURNERIC.—A falling market. At auction 112 bags China, ordinary finger and bulbs, sold at 12s. 9d. to 14s. per cwt. Good bright *Madras* finger sells steadily at 24s. to



25s. per cwt., but common kinds are neglected at 20s. per cwt. nominally for finger, and 11s. to 13s. per cwt. for bulbs.

WAX (BEES').—All kinds remain dear and scarce. Fine bleached white Calcutta would bring 8*l.* 5s. to 8*l.* 10s. per cwt.; yellow bleached up to 7*l.* for fine.

### THE LIVERPOOL MARKET.

ANISE.—The market has been cleared of recent arrivals of *Chilian* seed at 19s. Holders take from 21s. 6*d.* to 22s. per cwt.

CANARY-SEED.—Easier; 63s. has been taken for part of a parcel of 200 bags from the quay. Some holders ask 65s., but no business is to be done at the price.

GINGER.—*African*, after dropping to 45s., at which sales were made, has again recovered, and 46s. 6*d.* to 48s. has been paid for good sound root.

GUINEA-GRAINS.—A parcel recently arrived sold at 19s. ex quay.

JABORANDI.—For three bales poor perished leaves 3*d.* was realised at auction without reserve.

OIL (CASTOR).—Notwithstanding large arrivals per *Dictator* and *Ameer*, the price of 2½*d.* for good seconds Calcutta has been maintained, sellers being in no sense anxious.

WAX (BEES').—Six sacks of fine pale *Chilian* have been sold at 8*l.* Other grades are very firmly held at last prices.

### THE AMSTERDAM CINCHONA AUCTIONS.

(Telegram from our Correspondent.)

AMSTERDAM, Thursday evening.

At to-day's bark auctions 3,459 packages Java bark sold at a decline, the unit being only 3½*c.* (!) per half-kilo. Manufacturing bark in quill and chips brought 6*c.* to 37*c.* (= 1*d.* to 6½*d.* per lb.); ditto root, 7*c.* to 28*c.* (= 1½*d.* to 5*d.* per lb.); druggists' bark in quill and chips, 10*c.* to 65*c.* (= 1½*d.* to 11½*d.* per lb.); ditto root, 6*c.* to 14*c.* (= 1*d.* to 2½*d.* per lb.). The principal buyers were the Frankfort Quinine-works, Mr. Gustav Briegleb, the Brunswick, Amsterdam, and Auerbach Works.

OIL OF *CICUTA VIROSA*.—Professor Julius Trapp, of St. Petersburg, reports to the *Archiv* that 10 lbs. of the seeds of *Cicuta virosa* has yielded him 2 oz. of essential oil, which he finds to consist mainly of cuminol and cymol.

AMERICAN MENTHOL crystallises in long needles, melts at 42·3°, boils at 212·5° under 742 mm. pressure, and has in the crystalline state, a sp. gr. 0·890 at 20° C., and when fused a sp. gr. 0·8610 at 44·6°.

THE COMING SENEGA CROP.—Messrs. Schoellkopf, Hartford, & MacLagan (Limited) report as follows:—The position at present is as follows. Owing to the very severe cold and wet spring, no new root was collected during March-May, and, as a matter of fact, very little has been dug up to the present writing, for the half-breeds and Indians find more profitable employment in harvest operations, which are now going on. We therefore expect very little will be collected before the fall, and as this is very unusual, and as at the most only three months are now left for digging, we look for a short crop. As a rule, the great bulk of the root is dug in the spring. The stock of old root to be carried over has never been so small. When the new root begins to offer in decent quantities, it may be necessary to drop the price here a little, in order to secure it as cheap as possible; but otherwise we look for high figures for senega root next season. There is no "corner," or anything of that kind; but there is a real scarcity of the root, and within the last two months fully 7,000 lbs. were sold.

### Trade Notes.

MESSRS. C. GROSS & Co., of 9 Mincing Lane, E.C., have admitted Mr. Charles McCombie, who has been with them for the last thirteen years, as a partner into their firm.

THE chemical-works of H. Trommsdorff, Erfurt, Germany, have been acquired by the firm of E. Merck, of Darmstadt, with the exception of the sozoidol preparations and the Lauer-Brenner plasters, both of which Mr. Trommsdorff will continue to manufacture at Erfurt as before.

MR. E. MERCK, of Darmstadt (Hesse), announces that Mr. Henry Boyce, who hitherto had charge of his London branch at 4 Jewry Street, E.C., left his service on June 30, and that his London office and warehouse has been transferred to 4 Cullum Street, E.C. Mr. Fred. Boehm has been appointed manager of the London branch.

MR. CHRISTY STRONG, of 112 Oxford Road, Reading, has patented and now puts on the market a new sticky fly-paper, called the "Grip." It folds, and is quite clean to handle, while the stickiness of the opened paper is all that can be desired. The papers are made to sell at ½*d.* and 1*d.* each, and are supplied in convenient lots at prices which leave a good margin of profit.

### THE NEW IRISH CERTIFICATES OF DISPENSING SERVICE.

THE following is the new form of certificate now adopted for candidates for the Licence examination:—

PHARMACY ACT (IRELAND), 1875 (38 AND 39 VICT., CHAP. 57), SCHEDULES A AND B.

Form of Declaration of a Person who has been Apprentice or Assistant to a Pharmaceutical Chemist or Licentiate Apothecary qualified to grant a Certificate, and of the said qualified person.

#### SCHEDULE A.

##### FORM OF DECLARATION.

To the Registrar of the Pharmaceutical Society of Ireland.

I, \_\_\_\_\_, residing at \_\_\_\_\_, in the county of \_\_\_\_\_, hereby declare that I have completed a term of \_\_\_\_\_ years' service as Apprentice [or Assistant] to \_\_\_\_\_, a Pharmaceutical Chemist [or Licentiate Apothecary], keeping open shop, on his own account, for the Sale of Poisons, and Compounding of Medical Prescriptions, at \_\_\_\_\_, in the County of \_\_\_\_\_, or to a firm of Pharmaceutical Chemists [or Licentiate Apothecaries], of which I believe each member to be legally qualified to keep open shop, and was keeping open shop, as aforesaid, during the term above referred to; and I further declare that I was in his [or their] sole employment, and was *bona fide* employed during the business day.

(Signed)  
Dated this \_\_\_\_\_ day of \_\_\_\_\_, 18\_\_\_\_  
Made and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 18\_\_\_\_  
(Signed) \_\_\_\_\_ Magistrate.

#### SCHEDULE B.

##### FORM OF DECLARATION.

To the Registrar of the Pharmaceutical Society of Ireland.

I, \_\_\_\_\_, residing at \_\_\_\_\_, in the county of \_\_\_\_\_, hereby declare that \_\_\_\_\_ has completed with me and in my sole employment, or in the employment of the firm of \_\_\_\_\_, of which I am a partner, and of which firm each of the partners is legally qualified to keep open shop under the Pharmacy Act (Ireland), 1875 (*cide* Pharmaceutical License Examination, Regulation III.), a full term of \_\_\_\_\_ years, ending the \_\_\_\_\_ day of \_\_\_\_\_, 18\_\_\_\_, as Apprentice [or Assistant]. And I further declare that I [or the said firm] kept open shop for the Sale of Poisons and Compounding of Medical Prescriptions, at said place, during said period, and that \_\_\_\_\_ spent the business day in my [or our] employment.

(Signed)  
Dated this \_\_\_\_\_ day of \_\_\_\_\_, 18\_\_\_\_  
Made and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 18\_\_\_\_  
(Signed) \_\_\_\_\_ Magistrate.



### Memoranda for Correspondents.

*In letters for publication correspondents are requested to express their views as concisely as possible.*

*Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.*

*The name and address of the writer should accompany all communications with, if desired, a distinctive nom-de-plume.*

### Medicine-stamp Acts.

SIR,—The Nottingham and Notts Chemists' Association have been corresponding with their borough members respecting the working of the Medicine-stamp Acts, and as there are chemists in various parts of the country who may be smarting under the fines they have had to pay and seeking some means of obtaining redress, it may conduce to more uniform action if a brief outline of what we have done is made public, so that, if our action is approved, others may adopt a similar course, thus bringing greater pressure to bear in the proper quarters, and increasing the probabilities of obtaining a more just administration of the Acts.

Our first endeavour was to obtain an interview with our members of Parliament, but owing to the pressure of Parliamentary duties they were unable to grant this at present, promising to meet us later.

Accompanying our request for an interview we sent an abstract of the Acts, and a letter pointing out what we considered to be the grievances from which we suffer. In reply to these the Postmaster-General, the Right Hon. Arnold Morley, M.P., sent a very sympathetic letter asking for further particulars, and promising to do all he could for us; Colonel Seely and Mr. H. Smith Wright also showed great interest in the matter, the latter kindly promising to bring it under the notice of Sir Walter Foster and the Chancellor of the Exchequer. This was a good point gained, and as we had reached the ear of the head of the department, and knowing that fresh legislation was impossible at present, we aimed to show that the Acts having been passed more than a century ago, since which time enormous developments have taken place in every branch of business, they could not adequately meet the requirements of the present day, and afforded numerous opportunities for them to be vexatiously enforced; under these circumstances the practice of paying informers a portion of the fines offered an inducement to persons to harass us. We therefore asked that this practice might be abolished, and the Acts enforced in harmony with the requirements of the present day by officials receiving a salary only. Reply not yet to hand. So far as we can see, this is all that can be expected from Parliamentary officials at present; but there is one course the Pharmaceutical Society might adopt with advantage to the trade, and that is to approach the Board of Inland Revenue with a view to getting full recognition of the principle that Pharmacopœia preparations when bearing a label stating them to be such should be exempted from the operation of the Act. The principle is already recognised by the Board, inasmuch as a label "Smith's Orange Quinine Wine, prepared according to the British Pharmacopœia," is not liable; but if recommended for the cure of a disease it becomes liable. Why should it be exempt from the operation of one section of the Act and not from all? The preparations of the Pharmacopœia are not within the spirit of the Acts, and should be exempted; and surely it is within the scope of the Pharmaceutical Society's work to see that such

\* The reason for the concession referred to is, as we understand, from Alpe's "Handybook," that, in the opinion of the authorities, the explanation "prepared according to the British Pharmacopœia" neutralises the presumption that Smith claims a proprietary right. It is not an arbitrary exemption from any one section of the Act.—*Ed. C. & D.*

is done. The same remark may apply to other preparations the formula for which are common property, but this opens a wide subject which requires careful consideration.

Yours truly,  
207 Radford Road, Nottingham.  
July 5. WILLIAM GILL.

SIR.—You have observed some time ago that at a meeting of the Newcastle chemists a request was sent to the Pharmaceutical Society asking if they could give us information as to whether the absence of the patent-medicine stamp in Ireland acted detrimentally to the interests of the pharmacists—in other words, if it caused the country to be flooded with patent medicines. A few weeks ago we had a reply from the President of the Pharmaceutical Society saying that they were sorry they could not obtain any information on the subject.

Knowing that THE CHEMIST AND DRUGGIST is very widely read in Ireland, may I venture to suggest that you ask our Irish pharmacists to give their brethren on this side of the Channel the benefit of their experience in the matter? A request for post-card opinions, to be forwarded to the Editor of THE CHEMIST AND DRUGGIST, would be certain to bring a good deal of information on the subject which I feel sure would interest your readers.

Very truly yours,  
20 West Grainger Street,  
Newcastle-on-Tyne, July 5. GEORGE WEDDELL.

[Perhaps Irish chemists who may be able to give any information will communicate it to Mr. Weddell direct. The point he wants to get at is whether the medicine stamp not being legalised in Ireland, this circumstance has any effect in encouraging the production of proprietary medicines in cheap lots by unqualified persons.—*Ed. C. & D.*]

### What is Vinegar?

SIR—Mr Allen has entirely mistaken the point at issue and my object in giving the short quotations from Dr. Hassall's work True, in the 1876 edition, Dr. Hassall holds two opinions, so I shall now give the whole quotation from the first edition of his work, published in 1855, which distinctly proves that wool vinegar was a commercial article even then:—

The four principal kinds of vinegar met with in commerce are wine vinegar, malt vinegar, sugar vinegar, and wool vinegar. The first three depend upon fermentation, and result from the change of alcohol into acetic acid; while wool vinegar is obtained without intervention of fermentation, by the destructive distillation of wool. Not unfrequently more than one substance is combined in the manufacture of vinegar than mixtures of malt, corn and sugar or treacle are occasionally employed, in which case the resulting vinegar is, of course, a combination of two or more kinds of vinegar.

Perhaps Mr. Allen is acquainted with Dr. Sheridan Musprat's well-known work, entitled "Chemistry as Applied to Arts and Manufacture." The definition of vinegar, as given on page 4, is as follows:

Vinegar is, according to the nature of the sources whence it is obtained, classed into several varieties. Of these, the chief kinds are wine vinegar, sugar vinegar, malt vinegar, wool vinegar, and fruit vinegar, depending, however, upon the presence of acetic acid as the first active principle, although they each possess a flavour and aroma peculiar to themselves; and on this account preference is given to some kinds of vinegars. All are produced by the acetous fermentation, except wool vinegar.

If Mr. Allen would like to have the latest official definition of vinegar, he will find it in that excellent little book, written by Professor A. H. Church, F.R.S., and published by the Committee of Council on Education, entitled "Food: A Brief Account of its Sources, Constituents, and Uses." On page 212:—

Acetic acid is best known in the form of vinegar, which is a weak mixture of real acetic acid and water, usually flavoured with burnt sugar, or malt extract, or some condimental herb, as tarragon or chillies. Four kinds or varieties of vinegars are commonly used in Europe. These are (1) malt vinegar, (2) wine vinegar, (3) wool vinegar, (4) vinegar from starch, sugar, &c. The acid in all of these products is identical, but there are evident differences in flavour and odour between the different sorts. It is usual, however, by the addition of colouring-matter and flavouring essences to render the detection of the sources of the inferior vinegars very difficult. All the



varieties of vinegar, save that obtained by means of destructive distillation of wood, are formed by the oxidation of alcohol.

The above proves conclusively that the word vinegar includes all those articles of commerce known as various kinds of vinegar—wood vinegar being one of them—well known for over half a century; and if anyone asks to be supplied with vinegar without specifying a particular kind, no one can be prejudiced by receiving any one of the above-mentioned vinegars. If a particular vinegar is asked for, that particular kind of vinegar ought to be supplied.

Mr. Allen's remarks about the Pharmacopœia cut the ground from his own feet; remove it, and he has not a leg to stand upon.

The definition given of vinegar in the British Pharmacopœia is that of malt *plus* grain, and not actually that of malt vinegar. It is a mixed vinegar.

Strictly speaking, the only commercial article entitled to the exclusive term of vinegar is *vin aigre*, or sour wine. All others are only vinegar substitutes; and if I were acting in the capacity of a public analyst I should be extremely sorry to take up a false position on that account, such as the invincibles or elect, as Mr. Allen has termed them, have done.

Yours, truly,

WILLIAM JOHNSTONE, Ph.D.

1 Arundel Street, Strand, W.C.

#### Pharmacology.

SIR,—In your issue of July 1 you ask why the definition of "pharmacology" as the "action of medicinal agents on the body in health and disease" should be considered by the *Lancet* as new and incorrect.

This definition is certainly now new, seeing that formerly pharmacology treated of the action of drugs generally—physiologically and therapeutically. According to the scheme in present use for studying *materia medica* it is, however, incorrect.

In view of the vagueness which attaches to this word when used by some writers it may be well to direct attention to the subdivisions of *materia medica* as now recognised by its teachers. It is divided into pharmacognosy, pharmacology, therapeutics, and pharmacy.

By pharmacognosy is understood a knowledge of the crude drugs obtained from the vegetable and animal kingdoms, those which are of mineral origin, or which are of definite chemical composition, being within the domain of chemistry.

Pharmacology is of comparatively recent origin; it treats of the physiological action of drugs—that is, the "action of medicinal agents on the body in health."

Therapeutics is concerned with the "action of medicinal agents on the body in disease."

Pharmacy is the art of preparing and dispensing drugs for administration.

From the scope of these definitions it follows that the pharmacist only requires to be acquainted with the two branches pharmacognosy and pharmacy, and not at all with pharmacology, which has teachers, students, and laboratories devoted to it in most of the medical schools of Europe.

It is not correct, therefore, to describe the investigations which are prosecuted in the Research Laboratory of the Pharmaceutical Society as "pharmacological inquiries," as was done by the committee in their last report. To do so is to invest them, in the eyes of medical men, with a character they do not possess.

Yours truly,

WILLIAM KIRKBY.

The Owens College, Manchester,  
July 3.

#### Manchester Asks for More.

SIR,—It is very gratifying to find the Pharmaceutical Society upon the war-path at last in Manchester, after a protracted period of laziness and apathy. If the Council will only look around Manchester and its suburbs they will find plenty of work to do. Hundreds of corner shops abound, occupied usually by small "general dealers," who retail and supply scheduled poisons with impunity. I have been called upon above once to save the life of a child who had been narcotised with drugs supplied by an ignorant dealer to

an equally ignorant parent. The Food and Drugs inspectors would also reap a rich harvest by visiting the illegitimate as well as the legitimate retailers.

And why should the wholesale houses who supply these people with drugs and preparations go scot free? They richly deserve boycotting, and it is the duty of every good chemist to find them out and refuse their price-lists. Some of the Council may think this danger is magnified, or perhaps they may be too sleepy and apathetic to acknowledge it, or they may have too much of their own business to look after without bothering with their associates. Be it as it may, I am surrounded by these shops, and I know they are increasing and their danger; and I also know that one or two visits with public proceedings would—as far as drugs go—wipe them off our streets and put a few pounds more per week into the tills of the men who have had to work hard to pass the Society's severe examinations.

Sincerely yours,

GARLIC. (71/22)

#### Arsenic as a Poison and a Medicine.

SIR,—The Maybrick case should convince us of the necessity for legislation regulating the trade in arsenic fly-papers. If the preparation of arsenic employed were insoluble in water (which happens in many cases) it would be satisfactory, but as arsenious acid and arseniate of alkalies are sometimes contained in those papers, it is evident that some concomitant should be insisted upon so as to prevent them being used for criminal purposes, and to avoid accidents. I submit that, if a certain quantity of albuminous substance were present in the paper when washed out by water, or even acid, the albumen would precipitate the arsenic and render it comparatively harmless. This brings us to the consideration, was it possible in the ordinary course for arsenic, if placed in Valentine's meat-juice, to be the source whence the  $\frac{1}{10}$  grain found in Mr. Maybrick's body was obtained? I think not. The albumen of the meat-juice, especially if given warm, would precipitate it, and no sick person drains the dregs of the cup, and there was no evidence of any stirring or agitation of anything administered to Maybrick. Is it morally possible to extempore devise murder by poison? No one will admit it. If murder be intended, a knowledge of the properties of the drug to be administered will be acquired either directly from books or doctors, or by proxy—*i.e.*, accomplice. There was no suggestion of such in the Maybrick case. Is it conceivable that a poisoner, knowing that arsenic is easily detected, and is precipitated in Valentine's meat-juice, would put it from her possession into a bottle of such fluid? Certainly not. Few like the tasting of poisons, and is it probable that the fear of detection would not urge the guilty to force the draught to be taken quickly and at once to dispose of the residue? Would not the source of supply be concealed? Would there not be a nervous officiousness displayed by telling the doctor that the medicine or the nourishment taken at the time of the poison was disagreeing with the patient? About two years ago I was attending a patient for remittent fever, with gastro-enteritis. This patient was under treatment for several weeks. My cousin and I administered antiperiodics, diaphoretics, and cholagogues with suitable nourishment. The temperature was normal in the mornings, and above this in the evenings. The patient had for some days 10 to 16 drops daily, divided into small doses, of liq. arsenicalis. On a Sunday morning I was called and told that the patient was much worse. I found her in a state of collapse—eyes sunken, with dark circles under, voice choleraic, extremities cold and pulseless, pain in gastric region, burning throat, and vomiting. Well, there were only a few doses out of the bottle, and the whole bottle only contained one-eighth of a poisoning quantity. On examination there were found no arsenical signs in the lids or in the eyes, there were none on the tongue, nor on its margin, nor on the gums, and there was not diarrhoea. There were not the severe cramps, but there was tenderness over stomach and intestines. My patient died in the course of the day from exhaustion and gastro-enteritis. I will forfeit my liberty if the body be exhumed and submitted to Drs. Davies and Stephenson that  $\frac{1}{10}$  grain of arsenic will be found in it. There are yet other affections which more closely resemble arsenic poisoning than does

fatal gastro-enteritis—they are malignant cholera and the *Echis carinata* snake-bite. In Haynes' "Thanatophidia of India," will be found a case by the writer, in which the resemblance is alluded to, and the reasons why arsenic was the remedy, and fortunately with success, though marked success is very rare. In the cholera epidemic, 1869, in India, I tried arsenic, and in my report I mentioned that the local sphere of action of arsenic is the same as that of cholera. Arsenious acid does not act so much as a local irritant as it does as an organic nerve irritant and paralyser, hence the petechiæ of the stomach, intestines and skin, the lung spots and the condition of liver and kidneys, and the proneness to bleeding from stomach, bowels, margin of tongue, and even the lids. I have stood over a case of arsenical poisoning, made the *post-mortem*, and analysed the viscera. I found some specimens demonstrated arsenic freely and others from adjacent parts none at all. I was corroborated by Dr. Lyon, the then Government analyst, Bombay, and guilt was proved. There is no theory more disastrous than that an ingested irritant is necessary for exciting gastro-enteritis. It is present in typhoid fever, and in remittent or gastric fever, for which reason the latter is annexed to the former by some authors, and certainly, however rarely, it is autogenetic under some physiological conditions. As an instance of the vagaries of constitutions, I may mention that a child of mine, ten years old, partook of a portion of the dinner in a cottage where he wandered in the country, and he had the same evening gastro-enteritis, vomiting, high fever, thirst, furred tongue in a few days brown, a roseolar rash, later furunculæ and diarrhoea, and none of the others who ate the dinner suffered in the least. For several years one of my children could not eat certain foods without getting gastro-enteritis. These facts may interest those who wish to study the Maybrick case. I have at present an old patient, 87 years of age, who had gastro-enteritis four years ago, had very foul tongue, frequent nausea and vomiting, has had latterly some psoriasis. She has taken two rhubarb pills a week and a sleeping-draught every night for four years, she constantly suffers from nausea, after food she takes small doses of arsenic, strophanthus, and digitalis daily. I have told her friends she will probably die of gastro-enteritis, and would certainly if the pills were stopped. There will be more than  $\frac{1}{10}$  grain of arsenic in her body when she dies, and she has frequently had hawking in the throat.

Yours, &amp;c.

JOHN ROCHE, M.D.

White House Hotel, W.C.,  
June 3.

### Correction.

Mr. F. G. Ling, chemist, 231 Hackney Road, refers to a report published in THE CHEMIST AND DRUGGIST of June 9, under the heading "Prescribing Chemists," where it was stated that he deposed to having "treated the deceased first with calomel and scammony, and afterwards with astringent medicine." The powder, he explains, is a stock one, and was sold in the ordinary course of business, without any knowledge on his part of whom it was intended for. The astringent medicine was supplied two days later for diarrhoea, according to request. He asks for insertion of this statement, as the paragraph, as it stands, is misleading.

### DISPENSING NOTES

Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the undescribed mentioned topics.

#### "A Vague Term."

SIR,—The word is misquoted. It should be "desandrachotas." A leading Clifton physician uses it frequently, meaning that the pills shall be varnished with a solution of sandrach. W. M. M. (69/11.)  
Bristol.

SIR,—The word given as "desanchachotus" should be read "desandrachotas," evidently derived from sandarac, the

usual constituent of a pill-varnish, and coined by a prescriber in touch with modern pharmaceutical ideas, who was not disposed to hide the light of his classical attainments under the proverbial bushel.

W. A. WYNN.

### LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMISTS' AND DRUGGISTS' DIARY page 152 et seq.

64/22. *N. B.*—We should not think it likely that any Court would give you exclusive rights in the style of packing which you adopt. We do not see that you have any ground for action whatever.

70/29. *Twenty.*—You, as a registered chemist, are not liable to any penalty for becoming manager of a chemist's business owned by an unregistered person. He becomes liable if he take, use, or exhibit the title of chemist and druggist, or if he keep open shop for the sale of poisons.

70/37. *Cayenne* asks whether it is the custom of the trade to obtain a signature for Easton's syrup. We do not know how the custom of the trade is to be ascertained on such a matter. If Easton's syrup is, as we suppose it would be regarded, "a preparation of strychnine," the regulations prescribed for poisons in the first part of the schedule must be observed, whatever the custom of the trade may be.

69 62. *T. W. L.*—You must get the consent of the Board of Inland Revenue to supply methylated spirit in the first of the combinations you name. You are safer if you get their consent for the second lotion, though with liq. plumbi acet. in it, it could not be held that the lotion could be used as a beverage or internally as a medicine. A doctor's prescription cannot authorise you to infringe the law.

### MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulae, educational or other specific information can be obtained from the Publisher.

66/54. *Eczema* asks how he may treat an obstinate dry eczematous condition of the hands and face. 1. Carefully avoid exposure to cold wind or sunshine. 2. Wash as seldom as possible, and use water boiled with oatmeal, bran, or rice, and strained; no soap is permissible. 3. In the daytime apply very thinly an ointment of carbonate of zinc, colourless vaseline, and cold cream; at night smear with an ointment of Chaulmoogra oil 5j. and cold cream 5j. 4. Let the diet be simple. 5. Pay an annual visit to Harrogate, using the baths and waters; at other times use a mixture containing small doses of sulphate of magnesia, sulphate of iron, sulphuric acid, and a carminative.

71/27. *Salis.*—John Garham's "Manual of Tooth-extraction," a new edition of which has just been published by Mr. H. K. Lewis (1s. 6d.), is a suitable book.

62/27. *A. Sutherland.*—Both of your specimens are *Cerastium latifolium*, var. *nigrescens*, in different conditions.

66/39. *Commercial.*—See answer to "Extract," on page 32 of this volume (July 1, 1893). Possibly your formula does not contain the same proportion of glycerine; in that case, perhaps, the addition of sugar would answer your purpose, and supply the necessary body.



56/20. *Black Head*.—The paper to **Destroy Green-fly** by fumigation is an ordinary soft brown one, impregnated with solution of nitrate of potash, containing a very minute quantity of white arsenic.

57/34. *Chemists*.—To **Bolt Rabbits and Vermin from their Holes**, ordinary gas-tar has been recommended.

57/3. *R. S.*—We should think, to form the sample of **Polishing-powder into a Tablet**, you can use nothing better than a thinnish glycerine of tragacanth; for a paste, a little rape-seed or petroleum oil.

57/59. *Crem. Frigid.*—A **Good, Cheap Freezing-mixture for Ice-cream**.—A mixture of the coarsest salt and nitrate of soda obtainable. Let the proportions be made to suit the price.

59/12. *Nil.*—To **Stain the Eyelashes**, use any of the numerous stains given in back numbers—several have been published quite recently. It would require to be a stain or dye; a restorer would be of little use. Be careful, when applying, that the eye is closed and none allowed to go in. You will find it profitable and safer to arrange to do it for her yourself at regular intervals.

59/29. *Ajax*.—You may obtain a **Suitable Perfume for Violet-powder**, seeing that you object to using orris-root on account of its colour, by making a tincture of orris. 2 oz. to 3 oz. S.V.R. A few tonquin beans, say,  $\frac{1}{2}$  oz., improve the smell, or you may use the triple essence of violets made by any good maker.

227/39. *N. T. W.*—The sample of **Corn-plaster** you send seems to be a tissue-paper that has been floated upon soap-erate plaster, which has had about 10 per cent. salicylic acid added to it.

57/34. *Hartshorn Dregs*.—To **Cool a Room** during a smoking-concert, have plenty of ferns and suchlike plants placed in convenient places and well watered; a few empty margarine-kegs filled with a mixture of common salt and ice, hidden away among the plants; the windows opened from the top, and use at frequent intervals a few good perfume-sprays containing lavender-water or some similar perfume. *Hartshorn Dregs* we do not know by this name, which is probably a local one.

62/18. *A Foreigner*.—**Linoleum-makers**:—Barry, Ostlere & Co. (Limited), 3 and 4 Love Lane, London, E.C.; Kirealdy Linoleum Company (Limited), 151 Queen Victoria Street, London; M. Nairn & Co., 131 Aldersgate Street, London.

61/23. *Aestas* has made **Liq. Magnes. Cit.** three times, in *strict* accordance with the Pharmacopœia, once with distilled water, and has found a thick deposit form each time. The formula has been official many years. We have made it often, but never found the deposit mentioned. It can only be due to one of two causes. Perhaps the cork may not have been securely fastened down, and gas has escaped to a considerable extent. Did you put the bottle cork *down* when setting it aside for even a short time? Or tartaric acid may somehow have been amongst the ingredients used to make it.

61/38. *I. A. Q.*—The sample of powder you send is a **Cream of Tartar**—at least, it does contain acid tartrate of potassium. At the price you mention its being sold for (8d. per lb.) we should certainly be very suspicious of its answering the B.P. standard and tests.

61/39. *L. W. B.*—**Sticky Fly-papers**.—Gum Thus recent, 6 oz.; linseed oil, 3 oz.; honey or golden syrup,  $1\frac{1}{2}$  oz.

62/1. *R. W.*—**Effervescent Saline**.—See May 21, 1892 page 754.

229/41. *Phosphorous*.—**Ol. Sambuci Viridæ**.—Elder-leaves, fresh, 1 lb.; olive oil, 2 lbs. Boil till leaves are crisp; press out the oil and place it on the fire, and heat until fine green colour is produced.

63/43. *In the Dark*.—The sample of **Ginger Cordial** which you send consists of a soluble essence of ginger made from Jamaica ginger, pale, with a small proportion of sugar. You will find various formulæ for ginger essence in back numbers.

65/2. *Dr. Dünnerberger (Zürich)*.—A number of private price-marks were published in this journal January 15, 1887, and January 23, 1887. Several formulæ for mist. calc. chlor. e. ferro were published on March 25, 1893.

66/24. *Canada* wishes a quick and easy method for **Filtering Lime-juice** in quantity. He has tried various methods, but has found nothing better than filter-papers, and they are troublesome, slow, and expensive. [Have you tried kaolin or kieselguhr as precipitants, or "The Berkefeld Filters," which you will find advertised in this journal? They are very useful for such purposes.]

66/9. *Espectans*.—To **Soften and Toughen the Black Leather Bag and Leather Cover of Trunk**, why not use plain linseed oil, well rubbed in? "Boiled oil" might be too sticky; there is no other reason for its not being used.

66/30. *J. W. S.*—**Cream-of-Tartar Baking-powder**.—See May 7, 1892, page 630; see also **DIARY** for 1892. To **Destroy the Common Dandelion** on lawns, unless they are very numerous, you will find strong sulphuric acid dropped into the root effectual, while the other vegetation will not be interfered with. **Mucilage for Pasting Labels on Tin Boxes**.—See June 11, 1892, page 852; and you will find the paste recommended in the same page for botanic mounting a very suitable one for sticking tweed samples on paper. **Talc-coating on Pills**.—If you mean white or sugar coating, see "Art of Dispensing," pages 82 and 83.

66/18. *Chemist*.—Formula for **Stomach-cough**:—

Ac. nitric. dil.	..	..	..	..	3iss.
„ hydrocyan. dil.	..	..	..	..	5ss.
Glycerini	..	..	..	..	5vj.
Inf. quassia ad	..	..	..	..	3vj.

5ss. thrice daily, in water.

We cannot reprint formulæ from back numbers. You must buy the number required.

67/16. *Yorkshire*.—For **Brown Leather-varnish**, see **THE CHEMIST AND DRUGGIST**, July 18, 1891, page 96, and February 4, 1893, page 192.

66/41. *P. C.*—In the late Professor Redwood's obituary notice (**THE CHEMIST AND DRUGGIST**, March 12, 1892) we state that he died "on Saturday, March 5 (1892), at Boverton, in the house where he was born eighty-six years ago and five days previously."

59/23. *Diatom* wishes to know the general custom amongst chemists when cocaine for toothache and belladonna for the eyes are asked for? Very often the customers are strangers. He has considerable hesitancy in supplying drugs of so dangerous a nature. The hesitancy is natural, and each chemist must judge for himself, availing himself of his own business tact and knowledge of human nature. He is not compelled to retail such things, and will in the long run save himself trouble by refusing to do so

The suitable strength of cocaine solution for toothache is from 2 per cent. to 5 per cent.; price you must regulate by the class of trade and the appearance of the customer. Belladonna-lotion for the eyes—10 grains of the extract rubbed up in a mortar with a pint of boiling water makes an excellent one. It requires to be filtered.

58/74. *A. H. W.*—We think the **Wheel-grease** you send most likely consists of train or whale oil, which has been boiled with sulphur. You can regulate the melting-point by the addition of hard paraffin. The wool-fat ought to make a good basis, if the price suit.

37/12. *Mildew.*—The **Mildew Destroyer** is a solution of ordinary black soap in methylated spirit, and contains a trace of citronella oil. There seems to be little else in it.

68/73. *Dagonet.*—We cannot undertake to produce formulae from samples sent, as many of them are of so complex a nature that we have not the time at our disposal. We rather prefer to give such hints as may enable inquirers to work out the formulae for themselves, which we are always glad to publish for the common good. **Shoemakers' Ink** on the lines you wish.—Try something like this: Extract of logwood 100 parts, neutral chromate of potash 4 parts, water 3,000 parts. Add sufficient indigo-purple to give the requisite shade, and thicken with gum arabic, tragacanth and sugar candy, not starch. Indigo purple, which is the best preparation for such a purpose, is obtained by adding powdered indigo to about twenty times its weight of acid sulphate of soda in a state of fusion, stirring until a sample dropped into water produces a deep violet colour. The paste thus formed is treated with water, precipitated with common salt, and dried. For quick-drying inks several suitable formulæ have been published in back numbers; these generally contain aniline black.

53/57. *Rad.*—We cannot understand the difficulty with the **Crimson Marking-ink** of October 22, 1892. The formula is a good one, but the directions as to thoroughly washing the precipitated silver salt must be strictly carried out, otherwise the colour will not be so permanent; possibly the formation of the crystals you mention as being deposited after a time may be due to the same cause. The other sample you send seems to be one made on the principle of Redwood's famous formula. Have you tried your customer with the blue ink on same page?—if made as modified in Editor's foot-note it should make a very permanent ink. The problem you put to us concerning the **Black Threads in Linen**, samples of which you send, is more than we have time to follow up: have tried various bleaching-agents with little effect. Did you note that these threads seem rather thicker and harder than the others? Might not a repetition of the usual bleaching-processes have effect?—some threads require double the time of others to bleach properly. We are afraid, however, that the fault lies in the yarn, and the remedy will be found during the steeping or *water-retting* process in the preparation of the flax.

60/9. *Umquam.*—**Egg-julep.**—Curd soap,  $\frac{1}{2}$  oz.; saffron,  $\frac{1}{3}$  drachm; spirit of wine, 1 pint; rose-water, 1 gallon. Dissolve the soap in a pint of the rose-water with heat; macerate the saffron in spirit and strain; mix this with the remainder of the water and add to the soap solution. Add any other perfumes to taste.

58/56. *Hotspur.*—The two-bottle marking-ink made as directed in the paper by Mr. R. Wright (*C. & D.*, vol. 38, page 418), gives excellent results in other hands. On articles marked four years ago the marking is as distinct now as ever. (a) Equal quantities of the liquids named in the last formula should be used. (b) Solid toluidine (or the crude commercial article sold as toluidine) should be used; not the liquid pseudo-toluidine. For aniline—any aniline oil will do—the darker coloured, the better.

57/59. *Crem. Frigid.* asks if the following is a good and safe formula for teething-syrup—one that can be recommended as safe and efficacious for flatulency:—

Ol. anethi..	..	..	..	..	..	℥ viij.
Sp. ann. co.	..	..	..	..	..	..
Mag. carb.	..	..	..	..	..	ʒj.
Aq...	..	..	..	..	..	ʒiv.

Filter and add—

Sol. brom.	..	..	..	..	..	ʒj.
Pot. bich...	..	:	..	..	..	ʒss.
Tr. card. co.	..	..	..	..	..	ʒss.
Syr. rhead. ad	..	..	..	..	..	ʒvj.

Under six months,  $\frac{1}{2}$  teaspoonful; above six months, 1 teaspoonful.

He does not mention any quantity for the second ingredient. Otherwise we see no objection to the formula, and think it very likely to be of considerable use as a teething-syrup, &c.

61/35. *Chloral.*—We are sorry to hear of your **Difficulty in Preparing Colic-draught** of chloral, cannabis indica, &c., at page 25 of "**Veterinary Counter Practice**," and surprised you had difficulty in dissolving the extract in spirit. ammon. aromat. B.P. Try it this way, which has been found to answer: Rub up the extract with the spirit. ammon. aromat. in a mortar, add the chloral solution; make the liquor aloes (1 to 4) with ʒj. subcarbonate of potash to each ounce of liquor required. Add the turpentine to the linseed oil, then the liquor aloes, and shake well; next the spirit solution of extract and chloral. Label "Shake the bottle." Should time be a consideration, use decoct. aloes concent. (1 to 3) instead of making the liquor; it will answer just the same, but is more expensive.

61/52. *Yorks.*—**A Good Book on British Ferns and Flora.**—Messer's "British Wild Flowers," published by David Bogue, 10s. 6d.; or Hooker's "Student's Manual of the British Isles," 12s. 6d. (Macmillan). **Ochim Cinderbary** we do not know; there is a genus of *Onoclea* (L.) amongst the Polypody ferns; is it one of these you mean?

59/60. *Hair Stimulant.*—Here are two formulæ for **Hair-Lotions**; either will suit your label, and are perfectly harmless:—

Tr. cantharidis ..	..	..	..	..	..	ʒj.
Spirit. ammon. arom.	..	..	..	..	..	ʒiss.
Tr. cinchon. rub.	..	..	..	..	..	ʒj.
Ol. rosemar.	..	..	..	..	..	℥xxx.
Perfume ..	..	..	..	..	..	q.s.
Glycerini ..	..	..	..	..	..	ʒij.
Aqua ad ..	..	..	..	..	..	ʒxxx.

Mix the tinctures and spirit, add oil and perfume, then the water in which has been suspended  $\frac{1}{2}$  oz. of magn. carb. levis, filter through a wetted filter-paper, and add glycerine to filtrate.

Or—

Liq. epispastic. B.P.	..	..	..	..	..	ʒij.
Acid. acet. glacialis.	..	..	..	..	..	ʒj.
Eau de Cologne ..	..	..	..	..	..	ʒij.
Glycerini ..	..	..	..	..	..	ʒij.
Aq. ros. ad ..	..	..	..	..	..	ʒxxx.

M.

See also numerous formulæ given in back numbers.

55/17. *M. J. E.*—**To Destroy Wire-worms in Hop-yards** use the ground seed-cake saturated with a solution of 2 lbs. sulphate of copper in 1 gallon of water, roughly harrowed down; 1 oz. of strong sulphuric acid to be added to each gallon of sulphate-of-copper solution.

69/69. *Plenum.*—We do not know that there is much to choose between the books.

70/45. *Bismuth.*—Several formulæ for disappearing-ink are published in "**Scientific Mysteries**" (1s.).

*A. E. Breeze.*—We must decline to advise.



# SHOP BOTTLES & JARS

**WITH VITRIFIED (burnt in) LABELS**

*(Black Letters on a ground of Pink or White Enamel).*



Labels indestructible and of elegant appearance, forming an even surface with the glass or porcelain. The Jars of best porcelain, thoroughly greaseproof. The Bottles hand-made and of superior quality. Both are unsurpassed by anything in the market in every respect. Also a CHEAPER sort of Bottles and Jars, with labels equally indestructible, but very plain, especially suitable for Dispensaries, &c. Intending Buyers are requested to inspect Samples at

**H. POTHS & CO., 4 CREECHURCH LANE, LEADENHALL STREET, E.C.**



SEE OUR ADVERTISEMENT IN PAGE 5 (bottom folio) MAY 13 ISSUE.

## CRYSTAL PALACE JOHN BONDS GOLD MEDAL MARKING INK

Sale ever increasing at Home and Abroad, showing the appreciation by Trade and Public of this original and genuine Preparation.

**GIVEN AWAY**

And enclosed with every 6d. and 1s. Bottle and every 6d. and 1s. Marking Ink Pencil, a voucher entitling Purchasers to their Patent 18-carat gold-faced Rubber Stamp. Name in full or Monogram, for Marking Linen or Paper.

**WHOLESALE and EXPORT DEPOT: 75 SOUTHGATE ROAD, LONDON, E. N.**

*Send for Illustrated Price Lists and Samples for Travellers and Showrooms.*

**LARGEST SALE OF ANY MARKING INK IN THE WORLD.**

**"EUREKA" WEED KILLER** } **THE MOST SALEABLE, EFFECTIVE, AND CONCENTRATED YET INTRODUCED**

Send for Terms and Particulars to the Manufacturers of **HAYWARD'S DIPS, LINCOLN.**

*See Advertisement. page 52 (bottom folio), July 1, 1893.*

# STOCK, STOCK, STOCK "VINOLIA" SOAP

We create the Market, you supply the Goods.

We look on each Retailer as our Agent, and arrange that he shall have a good commission, by our protecting prices.

Are you in business for fun, or to make a living? If the latter, stock **"VINOLIA" SOAP**. It is half sold when shown in the shop. It helps to pay rent, and a moderate business in it would make you a living. **DON'T FORGET THIS!**

**"VINOLIA" SOAP.**—Premier, 4d.; Floral, 6d.; Balsamic, 8d.; Toilet, 10d.; and Vestal, 2s. 6d.  
Terebene "Vinolia" Soap, 4d.; Carbolic "Vinolia" Soap, 4d.; Sulphur "Vinolia" Soap, 4d.  
**SHAVING STICKS**—Toilet, 1s.; 1s. 6d.; Vestal, 2s. 6d. **FLAT CAKES**—Toilet, 2s.; Vestal, 4s. 6d.

THE  
"STANDARD OF QUALITY."

---

# ESSENTIAL OILS

MANUFACTURED OR SELECTED BY

## DODGE & OLCOTT,

NEW YORK, U.S.A.

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ESTABLISHED 1798.

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OILS BAY, CARAWAY, CLOVES, CUBEBS, PEPPERMINT, SANDAL,  
SASSAFRAS, SPEARMINT, TANSY, WINTERGREEN,  
WORMWOOD AND MANY OTHERS.

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AGENTS FOR THE UNITED KINGDOM—

### **ASHMORE & SON,**

AGENT FOR THE CONTINENT OF EUROPE—

6 MINCING LANE,

**CHAS. WESTPHAL,**

**London, E.C.**

195 Upper Thames Street,

London, E.C.



# LLOYD'S

## "LANADEPS"

### LLOYD'S "LANADEPS"

Is Wool Fat, specially purified, and contains 30 per cent. of water, and is capable of absorbing at least 50 per cent. more.

### LLOYD'S "LANADEPS"

Is unirritating to and rapidly absorbed by the skin, thus making it particularly valuable for the application of such drugs as Mercurials, Iodide of Potassium, Iodoform, &c., &c.

### LLOYD'S "LANADEPS"

Is put up in 1-lb. tins, price 1/4 each.

7-lb. "	"	1/2 per lb.
28-lb. "	"	1/1 "
56-lb. "	"	1/- "

### LLOYD'S "UNG. LANADIPIIS"

Is a cheap Ointment basis made with "Lanadeps," but of a softer consistence.

Is put up in 1-lb. tins, price 1/2 per lb.

7-lb. "	"	1/- "
---------	---	-------

SAMPLES FREE ON APPLICATION.

## Lloyd's Compressed Drugs

SPECIAL NET PRICES FOR CASH WITH ORDER.

	1 lb.	7 lb.		1 lb.	7 lb.
Borax ... ..	1/2	1/-	Compound Sulphur (Garrod's) ... ..	1/2	1/-
Chlorate of Potash ... ..	1/2	1/-	Soda and Ginger ... ..	1/2	1/-
Chlorate of Potash and Borax ... ..	1/2	1/-	Soda Mints ... ..	1/2	1/-
Cocaine, Chlorate of Potash, and Borax ...	3/-	2/10	Quinine (Bisulphate), gr. ij. ... ..	20/-	19/-

REGISTERED TRADE MARK.

IN TINS FREE.



Chlorate of Potash and Chlorate of Potash and Borax in 3d. and 6d. boxes, 15/- and 30/- per gross.

All kinds of Tablets in 6d. and 1/- Metal Screw Cap Bottles, 3/6 and 7/- per doz.

*Orders of half a gross of one kind with buyer's name on label if desired.*

**T. HOWARD LLOYD & CO.**  
**HIGH STREET & TOWNHALL LANE,**  
**LEICESTER.**



CRESCENT



BRAND.

# BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

## ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	1.90
Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	...	...	...	...	.035
Moisture	...	...	...	...	.82
Insoluble	...	...	...	...	nil

# PURE ALKALI,

GUARANTEED 58 DEGREES.

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,  
Bleachers, Dyers; Glass, Paper, and Soap Makers.

## CONCENTRATED CRYSTAL SODA

(Sesqui-Carbonate).

By far the Purest and Cheapest form of WASHING SODA.

Only 1 lb. of Concentrated Crystal Soda required to do the work of 2 lbs. of Washing Soda.

# SODA CRYSTALS

OF THE FINEST QUALITY.

Also BLEACHING POWDER.

# BRUNNER, MOND & CO., LIM.

Manufacturers of Soda by the Ammonia Process,

NORTHWICH, CHESHIRE.



# RICHARDSON'S

---

AN  
UNPRECEDENTED  
SUCCESS.

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IN BULK  
OR  
ATTRACTIVE  
RETAIL  
FORM.

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# CAPSULES.

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PRONOUNCED  
BY  
ALL  
PURCHASERS  
TO BE  
THE  
BEST  
IN  
THE  
MARKET.

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SEND  
POST CARD  
FOR  
SAMPLES  
AND  
QUOTATIONS.

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JOHN  
RICHARDSON & CO.  
LEICESTER,  
LIMITED.

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# MRS. WINSLOW'S SOOTHING SYRUP

FOR CHILDREN TEETHING,

Greatly facilitates the process of Teething, by softening the gums, reducing all inflammation; will allay ALL PAIN and spasmodic action, and is

**SURE TO REGULATE THE BOWELS.**


Depend upon it, Mothers, it will give rest to yourselves, and

**RELIEF & HEALTH TO YOUR INFANTS.**

## Mrs. WINSLOW'S SOOTHING SYRUP

Has been used for over Fifty Years by Millions of Mothers for their children while teething with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhoea.


## BROWN'S BRONCHIAL TROCHES

 CURE COUGH, COLD, HOARSENESS, AND INFLUENZA. CURE ANY IRRITATION OR SORENESS OF THE THROAT. RELIEVE THE HACKING COUGH IN CONSUMPTION. RELIEVE BRONCHITIS, ASTHMA, AND CATARRH. CLEAR AND GIVE STRENGTH TO THE VOICE OF SINGERS, AND ARE INDISPENSABLE TO PUBLIC SPEAKERS. SOOTHING AND SIMPLE, CHILDREN CAN USE THEM, AS THEY ASSIST EXPECTORATIONS AND RELIEVE HOARSENESS.

**NOTICE.**— Brown's Bronchial Troches are guaranteed to contain no Opium or other Poison.

London Office—33 FARRINGTON ROAD.

## THE MEXICAN HAIR RENEWER

 Prevents the Hair from Falling Off. Restores Grey or White Hair to its ORIGINAL COLOUR. Being delicately perfumed, it leaves no unpleasant odour. IS NOT a Dye, and therefore does not stain the skin, or even white linen. Should be in every house where a HAIR RENEWER is needed.

APPLY FOR WHOLESALE TERMS TO

**THE ANGLO-AMERICAN DRUG COMPANY, LIM.**  
33 FARRINGTON ROAD, LONDON, E.C.



# **DR. WILLIAMS' MEDICINE COMPANY TO THE TRADE.**

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## **DR. WILLIAMS' PINK PILLS FOR PALE PEOPLE**

are being regularly advertised in newspapers having an aggregate circulation of 5,000,000 every issue.

Contracts have already been made at least for two hundred inches of advertising space in each newspaper.

In consequence of this extensive advertising a large number of retail orders come to us every day.

**WE WISH THE TRADE TO GET THESE ORDERS INSTEAD.**

Chemists who are desirous of helping us to place this trade in their own hands are invited to send for new coloured pamphlets, handbills, and transparencies.

Liberal supply Carriage Paid on request.

**Dr. WILLIAMS' MEDICINE CO.,**

**46 Holborn Viaduct, LONDON.**

# LOFTHOUSE & SALTMER,

## MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS, HULL,

Manufacturers of Granular Effervescent Preparations. We shall be glad to give specially favourable quotations, and to send samples of our superior Nos. 1, 2, and 3 qualities of **CITRATE OF MAGNESIA**.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot, Otto de Rose, and all



Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine, Aniline Dyes; Bees' Wax, &c., &c.

MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sagrada, Castor Oil, Cod-liver Oil, Santal Oil, &c. Samples and Lowest Quotations per 1,000, or in Boxes for Retail, will be sent on application from either the Wholesale or Retail Trade.

# MAGNESIA

CARBONATE, CALCINED, AND HYDRATE.

## PURE FLUID MAGNESIA.

THE WASHINGTON CHEMICAL CO., WASHINGTON, COUNTY DURHAM, ENGLAND.

LONDON AGENTS—MESSRS. CLIFFORD CHRISTOPHERSON & CO., 17 Great Tower Street, London, E.C.

# SALICYLIC ACID

AND

# SALICYLATES

MANUFACTURED UNDER KOLBE'S PROCESS BY

J. HAUFF, FEUERBACH - STUTTGART.

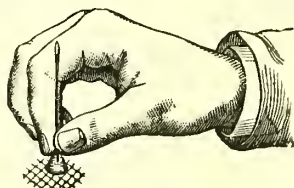
To be obtained from the Sole Agents.

N.B.—Stock kept in London.

FUERST BROS., 17 PHILPOT LANE, LONDON, E.C.

Telegrams—"FUERST LONDON." Telephone No. 1050.

Trade Mark.



Registered.

THE ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,  
12x PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR

DR. WARLOMONT'S CALF VACCINE

Tubes, 2s. each; Half-tubes, 1s. each. Pomade in vials, 5s.  
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes two-thirds full, 1s. 8d. each; Tubes one-third full, 1s. each; Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points, uncharged, 1s. per dozen, Vaccine Ejectors, 1s. 3d. each, including postage. P.O.O.'s (including postage and crossed London and Westminster Bank) with orders, payable to  
EDWARD DARKE, Secretary.

Office Hours 10 to 4. Saturdays, 10 to 2.

# POTASS. CYANIDE,

Nitrate of Silver, Chloride of Gold,

AND OTHER

# CHEMICALS

FOR PHARMACEUTICAL, PHOTOGRAPHIC, AND  
TECHNICAL PURPOSES.

FRED<sup>K</sup>. BOEHM, 4 Cullum Street, LONDON,

AGENT FOR THE

Deutsche Gold- und Silber-Scheide Anstalt, Frankfurt a/M.



# DUNCAN, FLOCKHART & CO.

*Wholesale and Export Druggists,*  
**EDINBURGH.**

## CHLOROFORM

(DUNCAN'S).

PREPARED FROM PURE AND METHYLATED SPIRIT.

Also CHLOROFORM (BLUE LABEL).

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in stoppered bottles, securely luted, and in hermetically sealed flasks when required.

*N.B.—We guarantee all the above CHLOROFORMS to be PURE CHLOROFORM, answering all the test of the British Pharmacopœia.*

## Schacht's Preparations.

### SCHACHT'S LIQUOR BISMUTHI.

Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is universally admitted. In  $\frac{1}{2}$  lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm diluted. When ordering, please to specify "SCHACHT'S."

### SCHACHT'S LIQ. BISMUTHI SEDATIVUS.

Contains pure Bismuth and *Pepsina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz.,  $\frac{1}{2}$  lb., and 1 lb. bottles.

### SCHACHT'S SYR. CINCHONÆ ALCOHOLICUS.

A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, *Bark minus the woody fibre*, and its efficiency has been proved by careful medical inquiry. Dose: Ten to sixty drops.

### SCHACHT'S PEPSINA LIQUIDA (REGISTERED TITLE).

Fluid Pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is *guaranteed* to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the fœtid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2s. 6d. each; and larger sizes, for dispensing, at a cheaper rate.

### SCHACHT'S PEPSINA LIQUIDA C. BISMUTHO.

Each drachm contains in a concentrated form, besides the fluid Pepsine a full dose of Schacht's Liquor Bismuthi. Dose: One drachm. In  $\frac{1}{2}$  lb. and 1 lb. bottles.

*N.B.—Peps. Liq. c. Bismutho Co. contains, in addition, one grain soluble Euonymin in each drachm.*

### SCHACHT'S PEPSINA LIQUIDA C. EUONYMIN.

Each drachm contains one grain of soluble Euonymin. Dose: One drachm. For dispensing,  $\frac{1}{2}$  lb. and 1 lb. bottles.

### SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

A perfect solution of Podophyllin, containing  $\frac{1}{4}$  grain in each drachm.

### SCHACHT'S LIQUOR CASCARÆ DULCIS.

A pleasant and active form of Cascara Sagrada. Dose: One to three teaspoonfuls diluted. In 4 oz.,  $\frac{1}{2}$  lb., and 1 lb. bottles.

### SCHACHT'S INFALLIBLE RENNET.

An entirely new Essence, perfectly reliable, for the coagulation of Milk and the production of Junkets and Curds and Whey. It is a preparation of the most wholesome nature, that *contains no salt*, and has no special taste, smell, or colour. In large bottles at 1s. of any Chemists. This Essence keeps well in any climate.

*The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists, or direct by post from*

## GILES, SCHACHT & CO., Clifton, Bristol.

## FOTHERGILL'S MADONAL, OR HEALTH AND LIVER DROPS.

For the Prevention and Cure of Diseases arising from Irregular Action of the Liver, Bowels, Kidneys, and the whole of the Alimentary Tract. In bottles at 2 6 and 4 6 each.

## MUNK'S COD-LACTONE.

Emulsified Cod Liver Oil with Laetophosphate of Lime. In bottles at 2 6 each.

**SOLE PROPRIETORS:—THE POPULAR REMEDIES MANUFACTURING COMPANY, BOMBAY.**

**Wholesale English Agents:—MAY, ROBERTS & CO., LONDON, and SOUTHALL BROS. & BARCLAY, BIRMINGHAM.**

# BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

**BARRON, SQUIRE & CO., BUSH LANE,**

and also the various Formulæ of the Special Preparations of

**JAMES BASS & SONS, HATTON GARDEN,**

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.*

## CAUTION! SPECIAL NOTICE TO THE TRADE. LION OINTMENT AND PILLS.

DEACON v. BURGESS.

In the High Court of Justice, Chancery Division, on Saturday, December 17th, Mr. Justice Kekewich, in delivering judgment, said "that it will be sufficient, I think, and I am sure quite safe now to say that the plaintiff (Mr. H. J. Deacon), who certainly has not proved his knowledge of the genuineness, but who has clearly indicated his ignorance, and who is attempting to sell as genuine medicine that of which he is really ignorant." N.B.—A full report of the Judgment appeared in THE CHEMIST AND DRUGGIST, December 24 last.

CHEMISTS ARE PARTICULARLY REQUESTED TO ORDER

**E. BURGESS, JUNR.'S, LION OINTMENT AND PILLS,**

And to see that the Label bears Address,

**59 GRAY'S INN ROAD, W.C.**

As these are the ONLY GENUINE Goods, and this fact will be EXTENSIVELY ADVERTISED throughout the Kingdom.

The Trade is respectfully requested to refer to the issues of "THE CHEMIST AND DRUGGIST" of December 10 and 17, and to read the Statutory Declaration made by E. Burgess, Junr., before the Lord Mayor of London. E. B., Junr., is the only person living with the knowledge of method of manufacture of these Remedies, and all statements to the contrary are untrue.

Another CHEMIST writes:—

"Your 'Star' Preparations, especially the Suppositories, Bougies, and Kola Coca, give very great satisfaction. The demand, although now fairly strong, promises to increase largely, as two of our local doctors widely recommend them."

Terms and Wholesale Prices of the "STAR"

PREPARATIONS on application to

**MANAGER, CENTRAL DEPOT** (for Gt. Britain and Colonies),

**OXFORD RD., GUSELEY, NEAR LEEDS.**



## HARROLINE PILLS.

The Great Harrogate Tonic.

An unfailing Cure for Poverty of Blood, Anæmia, Chlorosis, and every form of Debility arising therefrom.

**1s. 1½d. and 2s. 9d.**

WHOLESALE FROM THE  
**HARROLINE PILL CO.**  
HARROGATE.

FULL PARTICULARS & TERMS ON APPLICATION.



# THOMAS TYRER & CO.

STIRLING CHEMICAL WORKS. ESTABLISHED 1844.

**STRATFORD, LONDON,**

GUARANTEE ALL THEIR PREPARATIONS FOR

**PHARMACY, PHOTOGRAPHY, & ANALYSIS.**

**SPECIALITIES: PURE ACIDS**

**PHOSPHORIC—B.P.—1500—1750**

FREE ARSENIC, LEAD, LIME, SILICA, & SULPHUR.

**MERCURIALS—ETHERS—ESSENCES.**

**BEECHAM'S TOOTH PASTE.**

All Chemists, Druggists, and Stores should Stock this new article, which is being well advertised, and, as it is a really good speciality, will shortly be in great demand. It is put up in collapsible tubes, retail price 1/-, and can be obtained from any Wholesale House.

# BEECHAM'S PILLS

The most saleable Patent Medicine in the market.

**In Boxes 9½d., 1s. 1½d., and 2s. 9d. each.**

HOME RETAILERS desirous of exhibiting Iron Tablets, Showcards, or Dummies, and wishful to have a good supply of Handbills, Beecham's Oracles, Music, &c., are requested to notify their requirements to the Proprietor,

**THOMAS BEECHAM, St. Helens, LANCASHIRE.**

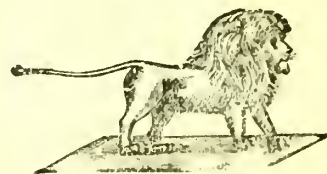
Examine your Stock. Every genuine Box and Bottle has the Lion Trade Mark on.



Facsimile of Ointment  
and Pill Label.



REGISTERED



TRADE MARK.

## BURGESS' LION OINTMENT, PILLS, & NERVE TONIC.

(Late Proprietor, E. BURGESS, of Holborn, W.C.)

The Proprietary Rights in the above Ointment, Pills, and Nerve Tonic, also goodwill of business, together with all Trade Marks, Registered at Home and Abroad, **HAVING BEEN PURCHASED BY ME OF THE SENIOR OFFICIAL RECEIVER, Mr. GEORGE WREFORD** (*he being Trustee to the Estate*), all ORDERS and communications should be sent to address at foot.

Notice is hereby given that all those infringing my rights, either by preparing or selling spurious Ointment, Pills, or Nerve Tonic, will be at once proceeded against.

**H. J. DEACON, Chemist,**  
15 BROMLEY ROAD, BECKENHAM, KENT.

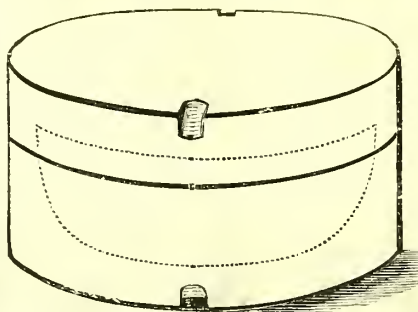
November 14, 1892.

# WILLIAM TOOGOOD.

**TOOGOOD'S**  
IMPROVED PATENT

## EARTHENWARE COVERED POTS

Are claimed to be the most  
perfect and convenient yet offered to  
the Trade.



Owing to the increasing demand  
for our Patent Pots, we have in-  
troduced a Special *THIN* Series  
for Dispensing.

These Pots are beautifully  
glazed and finished, and, being  
very light, are specially adapted  
for sending by post.

ORDINARY THICKNESS—									
1 dr.	2 dr.	1/2	3/4	1	1 1/4	2	3	4	8 ounces.
1/6	1/6	1/6	1/8	1/10	2/-	2 3	2 10	3 6	4 6 5 6 per doz.
THIN FOR DISPENSING—									
1 1/2	1 7	1 9	2/-	2 1/2	2 5	3/-	4/-	5/-	8 ounces.
									6/- per doz.

**TOOGOOD'S BATHING CAPS.** Write for New Season's List.

**TOOGOOD'S SPONGE BAGS.** Write for New Season's List.

**TOOGOOD'S FLESH GLOVES.** Write for New Season's List.

**TOOGOOD'S FEEDING BOTTLES.** Write for Special List.

**BURLINGTON BUILDINGS, HEDDON ST., REGENT STREET, LONDON, W.**



**HOMŒOPATHIC**  
First  
Established

Homœopathic Chemists.

**JAMES EPPS & CO**

48 Threadneedle Street,

London,

Eng.

**MEDICINES**

**CUMMINGS'**

TRADE



MARK.

**CYGNET BRAND**

**EUCALYPTUS OIL,**

Distilled from the leaves of *Eucalyptus CNEORIFOLIA*, formerly considered a sub-variety of *E. Oleosa*, but now classed as a distinct variety.

The Trade are invited to test this carefully prepared Oil, which since its recent introduction from Australia has won the unqualified approval of the leading British, American, and Continental Authorities.

Its purity, pleasant perfume, the unprecedentedly large percentage of crystallizable Eucalyptol it contains, and other good qualities, are deservedly gaining the preference of buyers.

Samples and Quotations on Application.

Sole Consignees—Wholesale only—

**J. W. DRYSDALE & CO.**

8 CREECHURCH LANE, LONDON, E.C.

**JOSEPH WATSON & SONS,**

MANUFACTURERS OF

**GLYCERINE**

DOUBLE DISTILLED CHEMICALLY PURE, 1260 Sp.G.,

ALSO FOR  
NITRO-GLYCERINE AND OTHER MANUFACTURING PURPOSES.

PACKED IN 10 AND 5 CWT. IRON DRUMS, TO BE RETURNED, AND IN 56 LBS. TINS FREE.

**WHITEHALL SOAP WORKS, LEEDS.**

**CLARKE'S**  
WORLD FAMED  
**BLOOD MIXTURE**  
THE GREAT  
**BLOOD PURIFIER.**

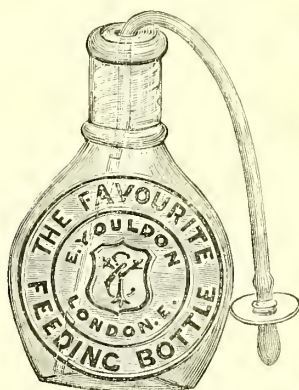
**CLARKE'S BLOOD MIXTURE** is ENTIRELY FREE from any POISON or metallic impregnation, does not contain ANY INJURIOUS INGREDIENT, and is a good, safe, and useful medicine."

ALFRED SWAINE TAYLOR, M.D., F.R.S.,  
Lecturer on  
Medical Jurisprudence and Toxicology.

Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.

**CAUTION.**—Immediate proceedings will be taken against all persons pirating the Trade Mark, "Blood Mixture" (Registered No. 3,275), Labels, Wrappers, Bills, or Advertisements, or in any way infringing the rights of the Sole Proprietors,

**THE LINCOLN & MIDLAND COUNTIES DRUG CO., LINCOLN, ENGLAND.**



# GLASS BOTTLES

OF EVERY DESCRIPTION.

Revised Price List on Application.

**FEEDING BOTTLES AT LOW RATES.**

Write for Prices of any kind of Bottle required to

## E. YOULDON,

East London Glass Bottle Warehouse,

36, 38, & 40 GREAT GARDEN STREET, WHITECHAPEL, LONDON, E.



**DISPENSING  
CITRATE  
FEEDING  
OIL &  
SAUCE**

**STOPPERED  
AND  
BOTTLES  
PLAIN.**

**LIMES  
KALIS  
POMADES  
PERFUMES**

GREAT VARIETY FOR SPECIALITIES.

### JOHNSEN & JÖRGENSEN.

Offices & Showroom—5 SAVAGE GARDENS, TOWER HILL, LONDON, E.C.

WAREHOUSE—WEST INDIA IMPORT DOCK, E.

## STOKES' CASH TILL.

REDUCED PRICE  
**50/-**

(Sent on Trial seven days, on receipt of two references).

Particulars and Testimonials on application.

**G. R. STOKES & CO., LIM.,**  
HANLEY, STAFFS.

## GLASS BOTTLES

GOOD AND CHEAP.

From Stock  
in London or  
direct from  
the works.

**THE NEW SHAPE FLATS,**

With rounded edges, or the ordinary kind, plain or graduated.

3 and 4 ounce .. .. 8/- per gross.  
6 and 8 .. .. 9/- "

**WHITE MOULDED PHIALS.**

1/2 oz. 1 oz. 1 1/2 oz. 2 oz.  
3/6 .. 3/9 .. 4/6 .. 5/3 per gross.

**PANEL BOTTLES.**

2 oz. 4 oz. 6 oz. 8 oz.  
7/- .. 8/- .. 9/- .. 9/- per gross.

**SPECIAL NOTICE.**—Six gross and upwards of assorted sizes sent Carriage Free to any part of England. Smaller quantities not carriage paid. Sample Bottle sent free on application.

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Established 60 Years. Bankers—London and Westminster Bank.

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# WHAT THE TRADE SAY.

## UNSOLICITED LETTER FROM A CHEMIST.

FOR  
PRICES  
SHOP  
ROUNDS  
SEE  
LOWER  
DOWN.

To E. BREFFIT & CO. (Lim.),  
83 Upper Thames Street,  
LONDON.

38 High Str.,  
Old Aberdeen,  
June 12, 1893.

Gentlemen,—Enclosed please find Cheque £20 12s. 8d. I may say I am exceedingly well pleased with my SHOP ROUNDS, both as regards Bottles and Labels. You will have another order soon, I think.

Yours truly,  
H. MILNE.

## HAND-MADE WHITE GLASS SHOP ROUNDS

COMPARE OUR PRICES.

SIZES	2dr.	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	4	6	8	10	12	16	20	24	30	32	40	60	80 oz.
UNSTOPPERED, NARROW or WIDE	7d.	7d.	9d.	9d.	11d.	1/3	1/4	1/9	2/	2/3	2/6	2/9	3/3	3/6	4/	4/	5/	6/3	8/6
NARROW, GROUND GLASS STOPPERED.	1/3	1/5	1/6	1/9	1/9	2/	2/3	2/8	3/6	3/9	4/	4/6	5/3	5/6	5/9	5/9	6/9	8/	10/6
WIDE, GROUND GLASS STOPPERED.	1/6	1/9	1/10	2/	2/	2/3	2/8	3/8	4/	4/3	4/6	5/3	5/9	6/	6/3	6/3	7/3	9/	11/

SEND TRIAL ORDER.

Prices per dozen, Net Cash, Delivered Free, London.

GOLD LABELLING on above, 3/ per dozen. ENGRAVED LABELS on above, 4/6 per dozen.

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REGISTERED SERIES.

CONSTANTLY INCREASING DEMAND. FIRST-CLASS BOTTLE FOR PUSHING TRADE FORWARD.

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**REDUCTIONS TO LARGE BUYERS.**  
SAMPLES FREE.

<b>JAMES BURROUGH</b>	<b>FINE PORT</b> (without tannin)	<b>CALE ST. DISTILLERY</b> <i>All at Lowest Prices and specially recommended.</i>
	<b>FINE SHERRY</b> (for Medicinal uses, &c.)	
	<b>FINE MALAGA</b> (for Steel Wine, &c.)	
	<b>FINE BURGUNDY</b> (for invalids)	
	<b>S.V.R.</b> and Methylated Spirit at lowest present prices.	<b>CHELSEA</b>

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FINEST ORANGE WINE FOR QUININE

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Sole Agents in United Kingdom and Colonies, excepting Canada, for

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MANUFACTURERS OF

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Prepared expressly for Oakley's and other Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines.  
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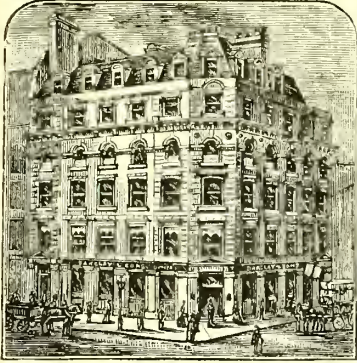
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2 oz.	...	...	8/- doz.
4 "	...	...	14/- "
4 "	Wickered, Gold Label	...	16/- "
$\frac{1}{2}$ pint	"	...	24/- "
1 "	"	...	47/- "
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We also supply Samples as follows:—

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Fifteen per cent. acid carbolic. Tins bear no name, only "Acme Brand."

1d. Packets, half-gross in box	...	6/6 gross
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1/- " " " "	6/6 "	

(Extra large size.)

### SALINE GRAPE JUICE.

Carefully prepared, and will stand any climate.

Patent Stopped Cheltenham, 8 oz., plain labels, each Bottle in handsome cartoon ... 8/9 doz.

Bulk, 7 lb. Tins free ... 1/- per lb. (6 doz. with buyer's own name on cartoon.)

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Loofah, lined and bound 3/3 doz.  
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Cure Gout, Rheumatism, Sciatica, Lumbago, Neuralgia.

The Excruciating Pain is quickly relieved, and cured in a few days, by these celebrated Pills, well known as the Great Remedy for the above Complaints. NO POISONOUS INGREDIENTS.

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